XVII.

VOL. II. MAY, JUNE, JULY, AUGUST, 1849. NO. V.

THE WESTERN JOURNAL,

OF

AGRICULTURE, MANUFACTURES, MECHANIC ARTS,
INTERNAL IMPROVEMENT, COMMERCE,

AND

GENERAL LITERATURE.

Agriculture and the Mechanic Arts are the basis of Civilization.

M. TARVER & T. F. RISK,
EDITORS AND PROPRIETORS.

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THE

WESTERN JOURNAL.

VOL. II. MAY. 1849. NO. V.

ART. I.—COMMERCIAL PROSPECTS OF 1849.

In the commercial department of the Western Journal, we have hitherto confined our labors chiefly to the collection and statement of facts, leaving our readers to form their own conclusions respecting the markets, domestic and foreign. Nor should we now have departed from our former course, but for the opinions and assumptions of some of our cotemporaries.

The agricultural staples of the United States, and more especially of the west, are limited in their production by the demand, rather than by the capacity of the country to produce them; and hence, there is a surplus continually pressing upon the market, which, like a dead weight, crushes the prosperity of the producers, and deprives them of the principal inducements to agricultural improvement. This being the case, it is natural that the attention of the political economist should be directed to the means of extending our commerce—both at home and abroad—to the end that the energies of the community may be called into more active operation. Upon a subject of so much importance, and one which requires a knowledge of so great a variety of facts, it is but reasonable to look for a diversity of opinion, not only in respect to the policy of the nation, but in regard to the commercial prospects of the season also.

Having met with an article in the March number of the Merchants' Magazine, which, in our opinion, is calculated to mislead the agriculturalists as well as the merchants, we should not do justice to the great interests which we have undertaken to promote, without examining the facts and opinions of the writer. He admits that there "are symptoms of growing speculation in many parts of the country," and yet it would be difficult for any one to write an article better calculated to aggravate these symptoms, and confirm the malady which they indicate. The writer is evidently of that school of political economists who look to foreign commerce as the only means of developing the resources of their own country, and labor continually to fix the minds of the American agriculturalists wholly on foreign markets, for the purpose, as it would seem, of preventing them from encouraging the enlargement of their own. But we will give the author an opportunity of speaking for himself, that our readers may form their own

conclusions respecting the correctness of his views. Having given a table showing the declining rates of exchange from the 1st of September, 1848, to the 21st of February, 1849, he proceeds to say:

"These falling rates, under the strength of the demand, as indicated in the above table of exports, show how great has been the influence of rising rates for cotton and produce, under increased exports, supported by the improved demand for stocks. All these afford indications of the possible reflux of the precious metals towards the United States, when the bulk of the spring imports may have been received. It will be remembered that the wants of England, in respect of breadstuffs, have been very large, notwithstanding that her crops have been good."

It is quite true that the imports of provisions and breadstuffs into Great Britain were large in 1848, when compared with years anterior to the famine of 1847; and it is but fair to conclude, that the abundance of money, and low price, will occasion an increase of consumption; but if we examine the state of our foreign commerce at the close of the year ending on the 30th of June, 1848, and recollect that the stock of breadstuffs have been gradually increasing since 1847, we shall find no reason to suppose that there is the slightest probability that a reflux of the precious metals towards the United States will take place during the present season, upon any other ground than that of being invested in American stocks.

In eleven months ending 6th December, 1847, the consumption of foreign grain in Great Britain, exceeded the quantity imported by 4,066,892 bushels. This excess was, of course, drawn from the stock in bond at the beginning of the year. But in the eleven months ending December 6th, 1848, the quantity imported exceeded the consumption by 2,811,994 bushels—flour and meal being estimated at the rate of 2¾ bushels to the cwt. Thus, at the close of the year, we find accumulating stocks, and as a natural consequence, towards the close of the winter, prices began to decline in anticipation of large imports from the north of Europe and other countries.

At Liverpool on the 9th of March, southern flour was quoted at 25s. 9d. to 26s. Western canal at 25s. to 25s. 6d. Philadelphia and Baltimore 24s. 6d. to 25s. 3d. per barrel, and on the 5th of April, according to the accounts brought by the Europa, flour was nominal at 22s. to 23s. 6d. per barrel, the latter price only obtainable for best Ohio brands. To authorize shipments at these rates, flour in New York should not cost the shipper more than from $4,25 to $4,50 per barrel, and it may well be questioned whether prices have yet reached the lowest point, although later accounts show a slight improvement. The low rates will doubtless check exportation, and when it is remembered that notwithstanding the large exportations of breadstuffs and provisions from the United States in 1848, we exported of specie and bullion $9,481,396 more than we imported, it is fair to conclude that, unless there is a falling off in our imports, we shall be under the necessity of again settling our balances by the exportation of the precious metals at the close of the season, although we may receive importations of specie during the spring months.

The foreign demand for American stocks, which has been induced by the abundance of money and low rate of interest in England, is calculated while it lasts, to support our commerce; but it constitutes a feature which should be observed with great caution, for stocks do not, nor can they ever constitute a permanent basis of trade between nations; and it is not in the nature of things that large sales of stocks can take place to foreign capitalists, without disturbing the natural and legitimate laws of trade. Every dollar of stocks sold to foreign capitalists, stands as a debt against this country, and the produce of our labor must go to pay the interest semi-annually, and it would be better that we should export specie to settle balances, than to pay them in stock bearing interest; for the laws of trade would in time return to the country the specie, and during its absence it would draw no interest.

We extract the following paragraph not because of any particular bearing which it has upon the subject under consideration, but on account of the *new light* which it sheds on the effects produced by an advance in the price of grain. The writer says, "The value of the exports of breadstuffs and provisions from the United States, as compared with the value of the same articles delivered on the Hudson river from the New York canals, is officially given as follows:—

	1846.	1847.	1848.
Export from United States, - -	$27,701,125	$68,701,921	$37,472,751
Delivered on the Hudson, - - -	30,348,790	50,302,275	33,987,012

"These figures show to how great an extent a favorable export trade swells the business of the canals, and therefore promotes the general prosperity of the whole agricultural sections. Thus the able reports of the Commisioner of Patents, Edmund Burke, Esq., than whom no gentleman has in official station, been more actively useful, estimates the wheat crop of 1847, for the Union, at 114,245,500 bushels, and the crop does not materially vary from year to year. Now from the above table, it appears that this crop, at New York prices, was worth $125,685,000, and at the prices of 1847, $171,367,750; an increase of $45,682,750. The actual value of the wheat and the wheat flour exported in that year, was $32,183,161; consequently, had that quantity been *given away*, the farmers would have gained $13,499,589 by the enhanced price which the remainder sold for at home, in consequence of taking that quantity out of market; but a large price was obtained for it abroad, and the value of the present crop, and the general prosperity, will be sustained by the same operation."

We have met with nothing for a long time that has puzzled us more than the paragraph last quoted. If we understand the writer's proposition, it is this: That the advance in the price of wheat which took place in 1847, increased the money value of the crop $45,682,750; that the actual amount exported in that year was $32,183,161; and had this quantity been given *away*, the farmers would have gained $13,499,589, by the enhanced price which the remainder sold for at home, in consequence of taking that quantity out of the market. Now, to sustain this proposition, we must suppose that the farmers sold the entire crop, leaving none for bread, or for seeding their land; and fur-

thermore, that it was all sold at New York prices. We cannot suppose, however, that the writer is so ignorant of the economy of farming as to imagine that all the wheat grown in the United States is sold by the producers, or even if it were, that the farmer receives the price which it brings in New York. The merchant, the carrier, the warehouseman, and a host of other agents, must all be paid out of the New York prices before the farmer can count his gains.

That a gain accrued to the farmers by reason of the enhanced price in the home market, there is no doubt; but to make that gain amount to $13,499,589, we must consider them to be gainers by seeding their land and eating bread from wheat valued at one dollar and fifty cents, instead of one dollar per bushel. If this be the principle upon which the writer estimates the farmer's gains, he has certainly made a brilliant discovery in the science of political economy; and if the farmers may grow rich by an advance in the price of the seed they sow, and the bread they eat, they may cease to regret the failure of the alchemists in their search for the philosopher's stone, for they have nothing to do but to sow less and discontinue their labors for a season, and the price of bread will rise sufficiently to make them as rich as their hearts can desire. But more than this—what powerful inducements does this theory offer to the exercise of that most excellent of all the virtues—charity; for in case the crops should be too abundant, the farmers have only to give away a portion to the poor of other countries, and grow rich by selling and eating the residue! This is indeed casting bread upon the waters to some purpose, and fully explains the meaning of Solomon, who doubtless comprehended the practical operation of our author's theory, for in his days gold became so abundant that silver was nothing accounted of—he made silver to be in Jerusalem as stones.

At the close of the paragraph, we are informed that notwithstanding the farmers might have been great gainers by giving away $32,188,161, in value of provisions and breadstuffs, yet "a large price was obtained for it abroad and the value of the present crop, and the general prosperity, will be sustained by the same operation;" but as prices have declined, and as the people abroad do not seem to encourage the exportation of these articles, we beg to suggest whether the farmers of this country would not act wisely in making a large donation to the poor of Europe, and thus enrich themselves at once from the home market, and the enhanced price of their bread. Before dismissing this paragraph, we beg to commend it to the most profound consideration of the farmers, merchants, and politicians of the west, for whose benefit, we suppose it to have been written.

We extract the following paragraphs, not so much for the purpose of commenting upon them, as to show the spirit and tone, which pervades the entire article.

"All the elements of a season of great prosperity continue to present themselves. Money in England is abundant, food at a fair level, labor abundant, and prices of produce and raw material comparatively low; while stocks of goods as well in England as in the countries she supplies, are by no means large, and the demand improving under confidence of continued peace and a renewed spirit of enterprise. In the

United States the outstanding credits are perhaps as small as ever before, when so great an amount of business is being transacted. Exchanges are in favor of the country, with every prospect of lucrative sales of crops that are somewhat in excess of the few past years in quantity.

"The operation of the California gold fever has been to impart a strong spirit of speculation, and to induce enterprise in all commercial countries of a character more bold than any that has marked commercial operations of the past few years."

* * * * * * * * *

"American produce is again selling freely at higher prices, and every element of prosperity is in action. The result is, that in all directions the desire to extend bank credits is manifest. In Illinois, Michigan, and Ohio paper schemes are being projected. In Pennsylvania a change in government favors the renewal of those money charters that expire in a short time; and in New York the multiplication of banks under the new law is very rapid. All these are symptoms of growing speculation; but as yet the ground is firm, the national wealth great, and the floating capital of the country never greater than now.

"The latest accounts of commercial affairs in every department in Great Britain show increasing activity and great buoyancy. Cotton was advancing slowly but surely, and sales to a large extent were made two weeks prior to the sailing of the Europa. Money continued plentiful, and first class bills were readily discounted as low as 2 per cent. The demand for United States six per cents was increasing at advanced rates. Sales had been made at 107, and the prices of the State stocks were also improving; Pennsylvania 5's were once more at 75 in London."

We have but one comment to offer upon these extracts, viz. that in our judgment the paper schemes in Illinois and other Western States, if any such exist, have originated in the scarcity of money, occasioned by a decline in the prices of produce since 1847, and are not induced by the high prices of produce and active elements of prosperity, which the author supposes to prevail in this region.

How far the gold of California will sustain the present prosperous condition of the country, we shall not pretend to predict; but we are fully persuaded, that unless the produce of gold in that region should be considerable, the flattering prospects indicated by the foregoing article, will not be realized by the American people during the present year.

The repeal of the corn laws in Great Britain will doubtless occasion an increase in the imports and consumption of breadstuffs; but it will be an increase in quantity rather than in money value, and will consequently add but little to our ability to pay for increased importations from that country.

No nation that relies upon foreign countries for a considerable portion of its bread, can prosper through an indefinite series of years, nor can it long sustain an independent position. For being dependant upon others for the primary element of subsistence, it would be continually liable to have its supplies cut off by wars, commercial revul-

sions, and other causes beyond its control; and would be compelled in time to yield to the policy of those on whom it relied for the means of existence. It remains to be seen how far Great Britain will voluntarily place herself in this dependant and perilous condition.

Many intelligent and influential individuals entertain the opinion that the farmers of the United States, can find a market in Great Britain, for all the surplus breadstuff and provisions that they can produce; and in their zeal to establish this opinion in the minds of others, they overlook many important facts that are calculated in their nature to modify such conclusions. And this inordinate zeal sometimes leads publishers of public journals into blunders so gross and palpable, that one is at a loss to decide whether they err through ignorance, accident, or design. This is especially the case in respect to the following article, which appeared recently in *Cist's Weekly Advertiser*, published at Cincinnati.

"There is a class of political economists who cannot conceive it possible for us to find a permanent market in Great Britain for our agricultural products.

"When the immense export to the old country in 1847 occured, the Atlas put it down to the score of famine, and confidently predicted that it could neither pay nor last.

"Well we have the official table of exports—Let us compare the two years.

AGRICULTURE.

Product of Animals.	1847.	1848.
Beef, tallow, hides, horned cattle	$1,905,341	$2,434,003
Butter and cheese	1,361,168	1,741,770
Pork (pickled) bacon, lard, live hogs	9,033,872	6,630,842
Horses and mules	195,195	277,349
Sheep	20,820	29,100
Wool	57,497	89,460
	$12,538,896	$11,202,534
Vegetable Food—		
Wheat	2,669,175	6,049,350
Flour	13,194,109	26,133,811
Indian corn	3,837,483	14,395,212
" meal	1,807,601	4,301,334
Rye meal	174,576	225,502
Rye, oats, and small grain and pulse	376,575	1,600,962
Biscuit or ship bread	610,090	556,266
Potatoes	86,277	109,062
Apples	88,944	92,961
Rice	2,331,824	3,605,896
	$25,187,647	$57,070,326

"It is not worth while to waste words, by way of comment, on these figures. They settle the question clearly and finally, that we shall forever find a permanent market for our surplus products across the Atlantic."

We publish the entire article as we find it, that it may be preserved as a curiosity in commercial statistics. The author has acquired con-

siderable reputation as a collector of statistics, and is often referred to as authority, and how he could commit so gross a blunder we cannot imagine. Indeed, we presume that no one but himself could guess the accident or motive that induced its perpetration. Were it not for the triumphant manner in which he declares that it is not worth while to waste words, by way of comment on these figures, that they settle the question clearly and finally, that we shall forever find a permanent market for our surplus products across the Atlantic, we might conclude that the tables had been changed through a mistake of the printer, but the remarks of the Editor most evidently have reference to the figures as they stand, for a falling off in the exports of breadstuffs and provisions from $68,272,860 in 1847, to $37,726,-543 in 1848, would not appear to settle the question so clearly and finally, that we shall forever find a permanent market for our surplus products across the Atlantic. The annual reports of the Secretary of the Treasury show that the amount of breadstuffs and provisions exported in 1848, was less by $30,446,317 than that of 1847. Most people would be apt to conclude that a falling off of nearly one-half in one year did not afford very strong grounds for such confident predictions; but Mr. Cist shows by his tables that there was an *increase* of $30,446,317, when in truth this is the amount of *decrease* as reported by the Secretary of the Treasury. Were his tables true, there would indeed, be some propriety in his conclusions. But the table, when *corrected*, does not yet show the true nature of the decline, for the falling off was chiefly in the exports to Great Britain. We have made up the following tables from the report of the Secretary of the Treasury, to show the amount of provisions and breadstuffs exported from this country to the United Kingdom of Great Britain, in the years ending on the 30th of June, 1847 and 1848.

EXPORTS OF PROVISIONS TO GREAT BRITAIN IN 1847.

Beef, tallow, hides,	Value,	$1,269,975
Pork, bacon, hams and lard,		3,471,597
Butter and cheese,		1,209,277
Total provisions,		$5,950,849
Grain.		
Wheat, bushels,	2,544,563	3,599,949
Flour, barrels,	2,457,076	15,104,574
Indian corn, do.	15,536,515	13,750,310
Rye meal, do.	5,292	34,977
Rye, oats, other small grain and pulse,		631,902
Biscuit or ship bread,		164,322
Potatoes, bushels,	3,337	2,827
Rice, tierces,	48,619	1,222,232
Total breadstuffs,		$37,874,075
Total of provisions and breadstuffs,		$43,824,924

EXPORTS OF PROVISIONS AND BREADSTUFFS TO GREAT BRITAIN IN 1848.

Provisions.		
Beef, tallow and hides,		Value, $806,204
Pork, hams, bacon and lard,		5,283,259
Butter and cheese,		821,839
Total provisions,		$6,911,302
Grain.		
Wheat, bushels,	1,531,989	$1,938,511
Flour, barrels,	958,744	6,119,976
Indian corn, bushels,	5,062,210	3,367,418
Indian meal, barrels,	226,100	729,413
Rye meal, barrels,	444	1,852
Rye, oats and other small grain and pulse,		101,204
Biscuit and ship bread,		80,253
Potatoes, bushels,	43	34
Rice, tierces,	18,960	405,469
Total breadstuffs,		$12,744,130
Total provisions and breadstuffs in 1848,		19,655,432

From this it appears that our entire exports of provisions and breadstuffs to Great Britain, in the year ending on the 30th June, 1848, was $19,655,432, against $43,824,924 in 1847, a falling off of nearly 125 per cent.; and that the exports of breadstuffs alone, in 1848 was only $12,744,130, against $37,874,075 in 1847, a falling off in these articles of nearly 200 per cent.

We should bear in mind the fact, that many important events, calculated to disturb the natural laws of commerce, have occurred since the beginning of 1846. Of these, the famine in Great Britain, the repeal of the corn laws, the war with Mexico, and the revolutions in Europe, are the most prominent. The more immediate effects produced by these causes are subsiding, and although it may be concluded that the results flowing from all these events may in the end be favorable to our commerce, yet we may conclude that when the causes of agitation have ceased, commerce will again resume its former channels, and not until then can we estimate how much we have gained by the events which have taken place. The season is one, which in our opinion, requires more than ordinary caution on the part of both merchants and farmers, for if a spirit of speculation should unfortunately prevail throughout the country, a severe revulsion must inevitably follow.

ART. II.—PACIFIC RAILWAY ROUTE THROUGH MISSOURI.

GENTLEMEN:—With this communication I send you an interesting letter from our friend W. R. SINGLETON, Esq. For some little time

past, I have had it in contemplation to publish a collection of facts, in addition to those already furnished to your valuable journal, relative to the importance and practicability of the contemplated railway to the Pacific, and the preferable route for it. A portion of my plan has been to collect from reliable sources, as complete a description of the physical geography of the country, from the Mississippi to the Pacific, as possible, in order to enable the public and the Congress of the United States to decide upon a route for this work, without the necessity of expending time and labor upon a topographical survey of so extensive a region. I am gratified in being enabled to say to you that every evidence which I have been enabled to collect, (and they are numerous,) confirms the conclusion to which I had previously arrived, an outline of which was published by you.

The route from the mouth of the Kansas, directly through the Great South Pass—thence by the Valley of Bear River to the Soda Spring—thence directly west to Humboldt's or Mary's River—thence down its valley to the *Sink*—and thence through the Salmon Trout Pass into the Valley of the Sacramento, is *beyond all doubt the preferable route for this magnificent work.* At an early period I hope to lay before the public a mass of evidence upon this subject, which will render the conclusion here announced *irresistible;* and in the meantime I will here add, in brief, the results to which these evidences point:

1. A railroad cannot be constructed from Memphis, or from any point south of it, directly west to the vicinity of Santa Fe, because of the swamps along the lower portion of the streams; the Ozark ranges and the deep *canons* through which all of the streams south of the Arkansas flow.

2. A railroad cannot be constructed from any point north of Memphis upon the Mississippi south westwardly to the *Passo del Norte*, and thence to the Pacific, because the *canons* of the streams of New Mexico constitute a serious impediment; because the route pursued by Col. Cook from the *Passo* westwards, lies within the bounds of the Mexican territory; because the Rio Gila is the boundary between us and Mexico as fixed by the late treaty, and because north of that stream there is no valley, but the mountains press up to its very waters, presenting for miles together perpendicular walls of rock.

3. A railroad cannot be constructed from the Mississippi by the way of Santa Fe or its vicinity, westward to the Pacific, either at San Diego or at Monterey, because, first, the mule trail from Santa Fe to San Angelos, ascends and descends numerous mountains, all of which constitute impassable barriers; second, because the streams west of the Sierra Madre never flow through channels of sufficient width for such a purpose, but are interrupted at short intervals by narrow chasms or canones through stupendous masses of solid rock; third, because the whole country from Santa Fe westward for more than three hundred miles, is one continued succession of mountain chains of so peculiar a construction that they offer treble the difficulties to such a work as mountains of the same elevation in other portions of the continent would offer; fourth, and because the mule trail is the best road which as yet has been discovered, or is likely to be discovered, and this is difficult even for mules.

4. A railroad cannot be carried through the territory west of the Rocky Mountains, north of the Gila, south of the Great South Pass and east of the Wahsatch chain of mountains, because this whole district consists of narrow vallies and ravines, traversed in every direction by immense mountain chains, compared to which the Alleghanies are but gentle eminences. It is a volcanic region and the interior forces have acted with tremendous power, throwing up huge, precipitous, rugged and irregular masses of primitive rock—presenting every where perpendicular walls, deep, narrow and crooked gorges, and streams madly rushing from great elevations. In the late able speech of Col. Benton, delivered in the Senate on presenting his bill for the construction of a National Road, that able statesmen quotes from Col. Fremont some descriptions of the three parks, which are embosomed in the Rocky Mountains south of the South Pass. Many persons have inferred from this circumstance that Col. Benton designed to convey the impression that a route could be found from the sources of the Arkansas to the Bay of San Francisco. I do not so understand him. I only understand him as fixing upon St. Louis and Francisco Bay as the proper termini for the road—as asserting that enough is already known to enable us to decide upon the proper route—as forbearing even to say that he *believes* a railway can be made at all, and as objecting to all private schemes for its construction, and insisting upon its being undertaken as a great national work.

I agree with Col. Benton, in believing that we have already an abundant treasure of facts, from which we can indicate the true line for the railway, and that no farther surveys are necessary *for that purpose.* I go farther than he does in pointing out the line for the work, *and asserting with the utmost confidence that it cannot be constructed upon any other line;* and I desire that this prediction shall be inserted in your journal, that I may incur the responsibility if found mistaken, and reap whatever of credit may be due, if found correct. My confidence is founded upon a careful examination of all which has been published bearing upon this subject; upon a variety of evidences which I have collected from men familiar with western geography, by correspondence and personal witnesses; and from some personal observation. I go farther than our distinguished Senator in firmly believing that a railway can be constructed from the Mississippi to the Bay of Francisco, not only without serious difficulty, but with even less of topographical impediment than can be found upon any railway at present in use within the States. I have seen no objection deserving a moment's consideration, save that of snow; and this objection may be easily and readily obviated. *We have but to elevate the rails three feet, and it is impossible that snow can prove a serious impediment.*

There is another controlling reason why the route which I have indicated should be preferred to all others. All of us agree that it is a matter of vast importance, considering our relations to the coasts of the Pacific, that a branch line should be constructed from some point upon the Columbia River, to intersect this great railway at some point west of the Rocky Mountains. This necessity has been anticipated by Col. Benton, and a provision inserted in his bill to meet it.

If the road be taken south of the South Pass, it will prove extremely difficult, and I think *impossible* to intersect it by a branch from Oregon, west of the mountains. If the route, which I have indicated, should be adopted, a railway can be made to ascend the valley of the Wallamette River to its head—thence over a low ridge into a plain over which it can be carried without other impediments, to the most northern bend of Humboldt or Mary's River. I would respectfully request those who take an interest in this subject to examine Colonel Fremont's map, and see for themselves how easily this may be done. Emigrants have already traveled this route to Oregon, and it is undoubtedly preferable to the one down Lewis' River, in all respects; but has not been much used, because the Indians upon it are more troublesome, than upon the other road. I have in my possession, a description of this road given by Mr. Applegate, an intelligent citizen of Oregon, who surveyed it from the Wallamette Valley to the Soda Spring in the northern bend of Bear River.

Another reason why the route I have indicated should be adopted, is that it *must* be the shortest one, and this is easily shown; a great circle passing through St. Louis and the Bay of Francisco, would go directly through the South Pass, and almost upon the line indicated to the head of Mary's River. If the continent were an uninterrupted plain from here to the Pacific, this would then be the preferable route; and why should it not be so considered now, when the road may follow an *air line* for more than half its length?

The people of Missouri, and of St. Louis especially, should remember that it is not only important to them that a railway should be constructed, but that it is still more important upon what line it shall be carried. I have endeavored to show that it must go through the South Pass; but it may have any one of a number of points for its eastern terminus, and go through the mountains then. I am persuaded that St. Louis is the appropriate point for its ultimate terminus, although I still think that the mouth of the Kansas should be the point where the United States should stop, leaving the portion through the State to State authority. I see no constitutional power to do otherwise. The suggestions you have made in your April number are eminently judicious, and I trust that the people will become fully aroused to the importance of the subject. It is perfectly astonishing how grossly ignorant the people of the east, and many eminent politicians are respecting western geography; and unless the whole truth is brought before the public and thoroughly elucidated, I consider it altogether probable, that we shall lose the benefit of having the eastern terminus of this road within our borders.

As the letter of Mr. Singleton contains an account of the physical geography of an important portion of our State, and as it may be some time before I can otherwise bring it before the public, and even possible that I may not do so at all; I have thought that his views would be of interest to your readers, and of much practical value, in estimating the true interests and resources of the State. The latter portion of it especially, announces in brief, the outline of a system of internal improvement for the States west of the Mississippi, which has grown, and continues to grow upon my esteem, the more I reflect

upon it. I trust Mr. Singleton will at an early period, illustrate this scheme in more detail. Your friend and obt. servant,

J. LOUGHBOROUGH.

INDEPENDENCE, March 15, 1849.

J. LOUGHBOROUGH, ESQ.—*Dear Sir:* Your favor of the 8th instant, I have just received, and hasten to reply. The questions which you have proposed to me, have been the subject of much thought to me for the past five or six months; and while the public mind has been greatly agitated by the various routes proposed from the Atlantic to the Pacific, I in common with the rest, have been influenced by the all engrossing subject.

Every individual member of the community seems to have formed his opinion relative to the best route for the contemplated railroad, and yet not one can say what is the nature of the country over which he proposes to carry the said road; and while to the engineer a subject of this magnitude affords material for deep and serious reflection, the opinions of others, so readily advanced and so boldly and confidently put forward, offer to him much amusement: for the thousand and one schemes which are projected tend to the bewilderment of the uninformed, and the vexation of their originators; while those best qualified to judge, and who know with more certainty relative to this matter, hesitate to declare what are the convictions of their own judgment.

Sometime last summer, for the purpose of drawing the attention of our own citizens to the important improvements which could be made in the west and south-west, I wrote a letter to Major BERRY, of Springfield, detailing my views at some length; and in connexion therewith I examined the railroad route proposed by Lieut. Maury, from Memphis to Monterey. Assuming his basis, I endeavored to shew that from Memphis a road to the west must pass as far north as the valley of the Osage, and if thus far, a branch to the Missouri river would be profitable.

Having succeeded in my object so far as to obtain a charter for the Independence and White River Railroad, and also a partial appropriation for the survey of the route, I perhaps should rest satisfied with the accomplishment of thus much of my scheme. But I must yet move on, andtrace out my complete plan, for when it shall have been fully developed, I feel confident that the whole west must unite in carrying it into execution; for it has tor its ultimate results the development of the resources of the entire Valley of the Mississippi, west of that river. I will however not detain you from the main object of this letter, but defer it until the conclusion. I therefore proceed to give you a "topographical description of the country between the Missouri and Arkansas rivers; also of that between the Mississippi river and the longitude of Council Grove."

I shall begin at the mouth of the Lamine, and drawing a line due south to its intersection of the south boundary line, where White river leaves the State—shall establish this as the "*datum line;*" dividing the eastern from the western part of Missouri, from the fact that the

two sections differ in their geographical, geological and topographical features. To a superficial observer, scarcely any difference would appear upon the map of the State; but the topographer must at the first glance detect a marked and striking one.

The main ridges first claim our attention. That ridge, which leaving the eastern branch of the Sierra Madre at Long's Peak, west of St. Vrain's Fort, in latitude 40 degrees and 20 minutes, longitude 105 deg. and 45 minutes, runs south until it heads the South Fork of the Platte, becomes the main divide between the waters which flow north to the Nebraska and east into the Missouri; and those which flow into the Mississippi by the Arkansas. It passes a few miles north of Bent's Fort, and from thence bears due east, to the head of Little Arkansas; separates it from Smoky Hill Fork of Kansas, and passing north of Council Grove, a few miles east of which, divides itself into two branches; the northern one passing into the State of Missouri between the head waters of the Osage and the small streams which empty directly into the Missouri.

This ridge continues until it reaches the head waters of the river Lamine, and then again divides, its main branch passes south of all the branches of the Lamine, is the divide between that stream and the waters of the Osage; and after running towards the valley of the Missouri, there loses itself between the mouths of the Lamine and Osage rivers. Changing its character topographically, from the former to the latter so materially, that that part near the Osage appears to be a different ridge altogether. Those who have noticed the slopes of the hills at the mouth of the Lamine, would scarcely identify them as belonging to the same ridge with the bluffs just above the Osage.

The southern branch of the principal ridge, passing between the heads of the Osage on the east, and the streams which empty into the Arkansas, retains its character, and passing into the State of Missouri, in Jasper county, one hundred and ten miles south of the mouth of the Kansas, becomes upon the maps the Ozark range; which name is assumed to distinguish it from other ridges in that section. Possessing no feature whatever to characterize it as a mountain chain, for in every essential it is different from a mountain, this ridge as it progresses to the east, becomes the most remarkable feature in the topography of the State. It is the dividing ridge between the waters of the Missouri on its northern slope, and those of the Mississippi on its southern, from its inception at Long's Peak to its terminus on the banks of the latter river. From Long's Peak to the datum line in Missouri, it is celebrated for its pampas, its long slopes, continuous directions, and the great breadth and uniformity of its summit level; from the same line to the Mississippi river, it is equally remarkable for the reverse of these features; and hence I have divided the southern half of the State into two topographical departments. And while in many particulars, the escarpments of the ridges on the western division, show a similarity to those in the eastern; yet in all the essential qualities, they differ very materially. This ridge, as it approaches the heads of the Gasconade and Current's rivers, retakes the character it had abandoned at Long's Peak, and retains it throughout the eastern section; crosses the Mississippi river at Grand Tower, is cut through

by that river, also by the Big Muddy in Illinois; passes on to the Ohio river at Golconda, is again severed by the Ohio; and passing through Kentucky, merges itself into the Cumberland Mountains, between the heads of the Kentucky river and Big Sandy, on the north, and the Cumberland river, on the south.

We have thus traced a connection between the eastern branch of the Rocky Mountains at Long's Peak, and the Cumberland Mountains in Kentucky, only broken by the Mississippi, Big Muddy, and Ohio rivers; Showing throughout its entire length, certain geological features, and at its eastern end, exhibiting topographical similarities to its western. This ridge is at an elevation much above all the other ridges in the Valley of the Mississippi, and from this circumstance, I have formed a theory to account for the prairies to the north of it; but I shall not trouble you with it here.

From the west boundary line to the datum line, the two main branches of the principal ridge, (which I shall now denominare, for the sake of distinction, the "Lamine Ridge," and the "Ozark,") have the same characteristic features; which are, great width and regularity of summit, general uniformity as to grades, and the very gradual descent to the vallies of the streams, which intersect their slopes on every side. To the eye of the engineer, presenting a delightful prospect, in their peculiar adaptation for railroads, plank roads, &c.

With this view, my attention has been drawn to the western department for many years past, to connect the Upper Missouri with the Lower Mississippi, by a railroad. That I have succeeded I have no hesitation in declaring, even beyond my most sanguine expectations, as I have previously stated.

I now proceed to a comparison of the eastern with the western topography of the State. Referring again to the map, we discover that east of the *datum line*, the main streams running northwardly into the Missouri, from the dividing ridge, pass much nearer to one another, and although generally parallel in their course, yet in their meanders approach each other very frequently. Again, the branches of one stream, will head within two or three miles of another main stream; as for example, I refer to the ridge between the Gasconade and Osage. Many small streams of both rivers, head past each other, within a very short distance of the other main stream. This is the peculiar feature of the topography east of the datum line, hence the country would be a most difficult one for railroads. The ridges branching off from the main ridge, between two unimportant branches, frequently are found to be higher, and more irregular in their grade at the summit, than the principal one; indeed, from a personal and instrumental examination, it has been pronounced a more remarkable country than any within the States. Hence, in my examination of its geological features, when compared with those of the Sierra Madre, I unhesitatingly pronounce it to have been subjected to the same volcanic influences, although in a milder form. The characteristic rocks, are identical with those of Long's Peak, and many other points of the Sierra Madre. The main dividing ridge, before mentioned, east of the datum line, becomes broken, irregular, and mountainous, as it approaches the heads of the

Piney, Meramec, Indian Creek, and Big rivers, on the north; and Eleven Points, Currents, Black, and St. Francis, on the south, it becomes more and more broken, irregular, and ill defined; as it approaches the seat of volcanic action, near the Iron Mountain and Pilot Knob, those most wonderful of all natural objects, the ridge proper, loses itself in a strange anomaly, a valley. What, say you, a valley? Yes, a very valley! on one of the highest ridges in the State. The mountains which form this valley, rise up from the summit of this ridge, mostly of metalliferous formations, generally covered with a mixed growth of timber. I shall never, never forget, the grand and striking view of these mountains, which I obtained from an elevated point, just at sunrise, in the month of November, 1839. The autumn scenery of the west is celebrated in song, in story, and on canvas; but I am satisfied, neither harp, pen, or pencil, could portray one-tenth of the beauties of that one glance, as I surmounted the ridge, from the summit of which by one "coup d'œil," my soul drank in all the beauties of the Bellevue Valley. And—but I am the topographer and not now a poet—so I must e'en dismount from Pegasus, and trudge onward in the more humble garb of a pedestrian! As I have already remarked, this ridge continues its course unbroken to the Mississippi river, at the Grand Tower; but previous to which, it branches in several directions. 1st. Northwardly towards the Meramec, forming the divide between the Big river of the Meramec, and the various short and rapid streams that run into the Mississippi, which I shall term the Meramec Ridge. 2d. Southwardly towards the sunken district in Scott and New Madrid counties, east of the St. Francis, called the St. Francis Ridge, and gradually loses itself in the valley of that stream in the sunken region, and the Mississippi bottom.

Relative to the first branch, or Meramec Ridge, I have a few remarks to make. In its character, it possesses all the features of the main ridge, more broken and irregular as it is near to, and modifying those traits as it recedes from the parent trunk; until at the Meramec, it is similar to the bluffs on the Upper Missouri river, which are the breaks of the first main branch or Lamine Ridge, east of Council Grove. In this ridge, and the branches from it, are our most valuable lead mines, copper mines, and stone quarries, and as they are more and more developed, tend more and more to the benefit of our common State. But a few years hence, and we must have railroads to pierce this ridge in several directions, to transport these valuable products of the earth to the Mississippi; at present, the ox team is the precursor of the iron horse. I say *pierce it*, for the survey of it, as well as the main ridge, has settled the question that no railroad can be constructed *upon* it; it being too irregular and difficult as to grades, and horizontal section. The southern slope of the main or Ozark Ridge from the *datum line*, to the geologist becomes strikingly interesting, as he approaches its eastern terminus. First are the points running immediately down to White river, in all of which near the main ridge, are evidences of coal; as he approaches the Eleven Points, the mineral resources become more interesting, until, having reached the waters of the Current river, he is involved among intermediate hills, knobs and mountains of metalic deposites

of iron, lead, copper, gold, silver, zinc, cobalt, and many other rare metals; while porpheritic and granitic formations lead him to imagine himself at once transported to the "Stony Mountains," or the "Nevada" of California itself. The topographer can only look on with wonder and amazement. Where shall he begin his sketch? where place his main divide? echo answers "where!" With "confusion worse confounded," "rocks on rocks, piled mountains high," and a dozen other poetic sentences, which I might quote, to describe faintly, what in reality exists, all whirling through my brain, even to contemplate such a general "crash of worlds," my good friend the geologist, is quietly seated with "hammer in hand," pounding away with his specimens around him, oblivious of the world! Can I describe a banquet room, after a drunken revel? The surgeon may heal the broken heads and noses, the cabinet workman, the chairs and tables, but I have nought to do there—the earth and her sisters have had a glorious spree, and I leave those most interested to make the best of it. The topographer has no business there, so then hasten on to another equally interesting feature of a different nature—the country of the St. Francis. While the same convulsions were going on, and the country near the Iron Mountain and south-west of it was elevated, that near the lower St. Francis was depressed. We have no reason to doubt, that from the last bluff on the west side below the mouth of the Ohio to the mouth of White river, the general level of the country on the river was the same as above that point, but by the great earthquake which raised the one, the other was sunken, and is now as irregular in its lakes, river, and creeks, as the former is in its ridges and streams.

The eastern section of the State is broken and irregular in all its ridges—its streams tortuous, rapid, of sudden descent; draining a country rocky and precipitous where its escarpments approach the vallies. The streams excavated to a great depth below the summit of the ridges and rising by a gentle slope to within a short distance of the ridge, then by a rapid descent gaining its summit. So universally is this the case, that in all my surveys for railroads, a tunnel with very heavy ascending and descending grades was necessary to effect the transit from the head of the valley of one stream to another. The western section is generally regular and uniform, both in its vertical and horizontal sections; streams descending from the summit ridges by gentle slopes to the main vallies, and almost imperceptible in their descent; the ridges are wide, continuously direct, and uniform in grade, mostly covered with prairies, and peculiarly adapted to railroads.

"Where should a railroad go from St. Louis west?

After a careful examination I at once pronounce it by all means the most practical and economical to pass from St. Louis westwardly, until by some small stream the valley of the Missouri can be reached just above the Big Bonhomme Bottom, thence around the slopes of the hills on the south bank of the Missouri, to the Lamine; up the valley of this stream to Black Fork, to Davis' Fork, and thence on to the main or Lamine ridge, between Buck Knob and Wagon Knob, in LaFayette county; thence on said divide to Cool Spring and Lone Jack in Jackson county, and thence crossing the breaks of Little and

Big Blue, reach the "plains," as they are familiarly called, on the Santa Fe road at Black Jack Point. That this road can be constructed at a less cost than any other, all must admit. From St. Louis to the Missouri river but one small bridge is required; thence twelve other small bridges to the Gasconade—a large one there; thence three small ones to Osage—a large one there; thence eleven to mouth of Lamine—total, twenty-seven small bridges, average of one hundred feet, and two large ones. It is preferable for two reasons to use the valley of the Missouri: first, the grades will be uniform; and second, the branches of any main streams will all be crossed at one point, thus avoiding the difficulties always encountered in crossing a country over the breaks of the drainage; thereby giving a zig zag grade to the road. In addition, the amount of water to be passed can always be done at one point much better and cheaper than in fifty or a hundred. Again, the Missouri itself will be avoided; whereas on the north side it must be crossed twice. That the south side of the Missouri is preferable, is obvious: the amount of water received into the river from the north is much greater than from the south; almost all the streams on the north side head some distance in Iowa; and the whole drainage of the north half of the State, is through the Missouri river; whereas, on the south half, not more than two-thirds of it is drained by the Missouri. These are important considerations, and have influenced me in forming my opinion. But as interest must ever sway all men in their opinions, I doubt if I could convince any man on the north side that I am correct. Finally, I say let us have a railroad—north side or south side—from the east or from the west—first, last and all the time, my cry is a railroad.

By an observation of the map of the Mississippi Valley and tracing a line from Lake Superior due west on the 48th parallel, from the mouth of Pigeon river, north of the Missabay Heights, to longitude 95 degrees; thence south to the 46th parallel; thence west to 97 deg. longitude; thence south to 45th parallel, where it intersects the Plateau Du Coteau; thence in a south-eastern direction along the same, to the head of the Des Moines, longitude 96 deg. 10 min., latitude 44 deg. 10 min.; thence south to Red river; thence along the south bank of same, to the Mississippi river, we will encompass the western half of this great valley; and to those whose attention has been confined entirely to our Eastern States and their capacities, the assertion that the population of the Mississippi Valley is to control the world, will excite no other feeling than a laugh of derision. Those of us however, who have been close observers of the rise and progress of the west—have studied its peculiar features; have taken into view the genius of its people and their inevitable destiny; and have closely observed the elements which constitute us a whole people; have contemplated its soil, its mineral resources, and the water power now running to waste—must inevitably conclude that within this "grand basin," in another half century, will be gathered the most powerful nation upon the globe. Casting the eye to the west and north-west, we behold a tract of country, vast in extent, watered by numerous large streams, yet as little known to us as the heads of the Columbia or Colorado. ***But that country must be settled.*** Observe the connec-

tion which may be made by a railroad from the mouth of St. Peters to Lake Superior, and from the mouth of St. Peters to the Des Moines, thence to the head of the Platte and Grand rivers; down the ridge between the same to the Missouri, through Liberty and Independence, by the Independence and White River Railroad and White river to New Orleans, or to Memphis, and thence to Charleston, South Carolina. This I assume as a main stem, from which may branch out roads to Galena, thence to Chicago—the Des Moines to be improved by slack water. A railroad from Peoria to the mouth of the Des Moines, will connect us with the trade of the Illinois. One fact I wish you to note: from the mouth of St. Peters by a railroad through Independence and White river, the distance is less than by the Mississippi river past St. Louis. What difference would there be when the steam car shall compete with the steamboat? When St. Joseph shall have completed her road to Hannibal, and this main stem shall be in operation, it would draw all of the trade from the northern section of the State; and in the winter season, would be the only chance of communication with New Orleans.

Will this improvement injure St. Louis? By no means. Did the improvements of Pennsylvania injure New York, Boston, or Baltimore? Certainly not; for every dollar expended for the improvement of either of those cities, must tend to the benefit of all.

St. Louis will have roads of her own; one to the east, one to the Iron Mountain, and one perhaps to the west.

Finally, let us all unite in the one grand scheme before us—a railroad to the Pacific, be it by one route or another, I am for the railroad.

I am, dear sir,

Your obd't serv't,

WM. R. SINGLETON, *Engineer*

Independence and Missouri River Railroad.

ART. III.—ASSOCIATION OF LABOR AND SKILL—MECHANICS' INSTITUTE.

The power of associated labor, intelligence and enterprise—The advantages of such an association to the man of labor—The Mechanics' Institute of St. Louis—The importance of employing professors who may teach at night—In such an Institution mechanics may acquire knowledge sufficient for almost any useful or social purpose—The free cities of Europe in the Middle Ages—Their influence in breaking the feudal power—The prejudices arising from social distinctions—The benefit of free social intercourse between all classes—Vice the only true ground of exclusion—Combination of physical and mental labor.

The power of associated intelligence, labor, and enterprise, guided and directed by a common interest, has been so often demonstrated, that to urge its importance and benefits now, might seem almost absurd. But the arguments and experience of the past are soon forgotten, and cease to influence the minds and actions of a large portion of mankind, unless frequently repeated and urged upon their attention. To him who has to depend upon the labor of his own hands for the

subsistance of himself and family—whose mental and physical energies must direct and work out his own fortunes, this subject is of peculiar interest, appealing, as it does, to all those feelings calculated to arouse a legitimate ambition in the human heart. Through the medium of a well organized association, he may be enabled not only to improve himself in those sciences connected with his art or occupation, but he may fit himself for the discharge of any duty or trust which may be imposed upon him; while, if isolated, and acting alone, with nothing to stimulate him but necessity—having to undergo daily and constant toil to maintain himself and family—he finds neither the time nor inclination, nor is he inspired with ambition, to improve his mind beyond what is necessary to enable him to carry on his daily avocation; but were he associated with his fellow mechanics or workmen, for the high and noble purpose of improving his mental and social condition, the stimulating effects of a generous emulation would arouse and call into action every principle of manhood that belonged to his nature. But, besides the improvement of mind, and the advantages accruing in a business point of view, there are also social advantages, which alone constitute a sufficient reason for such an organization; for, after all, the character of an individual is formed principally, in the private social circles of life. Here we take on the habits and imbibe the principles of virtue or depravity; here centres the heart's gladness or sorrow; here we are linked in destiny with those who are to cast sunshine or gloom over our future lives. Therefore, an association calculated to elevate, and give tone to the mental and moral character of the society in which we move, and which will enable us to make selection of congenial spirits with whom to associate in after life, is of itself of infinite advantage. But if we take as true the maxim—which we suppose all will admit—*that a Republic is great in proportion to the amount of intellectual development and moral culture of her citizens, that all her acts are but the reflection of the national will, based upon the amount of virtue and intelligence in the whole*—then, indeed, does this question assume a magnitude and importance commensurate with the greatest intellect, the loftiest genius, and highest aspirations; a field wherein all may labor, not only with a consciousness of right in a good cause, but with a fair expectation of reward—if not in the more substantial benefits of life—yet, in the establishment of a name that shall be more enduring than the statue of brass, because written upon the institutions of the country, to be impressed upon the minds and hearts of future generations.

While upon this subject, we cannot refrain from making some remarks in relation to the Mechanics' Institute of St. Louis, and the advantages which may accrue from an organization having in view not merely the exhibition of specimens of artistical skill, but also a plan of instruction in all those branches of science connected with the several departments of mechanism, as well as a general course of instruction, that would fit the learner for any and every duty and condition in life.

The charter granted by the State, is sufficient for all these purposes. With a proper organization, therefore, under it, and the employment of competent professors and teachers in the different branches, who

shall teach at night, so as not to trench upon the time appropriated to labor and business, every mechanic in the city may acquire an education that will be not only a source of pleasure, but of profit also, and fit him for the discharge of every social duty. This is the course now being pursued by similar institutions in other parts of the country, and the results flowing therefrom, thus far, are most propitious. Powers, the great artist, was connected with the Mechanics' Institute at Cincinnati, when his genius made the first effort in modeling those sculptured forms of beauty that were destined to give his name to future fame, and confer honor upon his country. It was his connection with this Institute that first drew friends around him, who, appreciating his genius, generously supplied him with the means of visiting Italy, there to perfect himself in his art.

If such an organization as we have suggested, were to be made in the Mechanics' Institute of St. Louis, there should be some provision for an apprentices' department, with competent teachers, and a course of studies adapted to their several pursuits, and calculated to prepare them for future usefulness, and excellence in their respective arts.

Ten hours a day is the time custom has fixed for journeymen and apprentices to labor; this gives them fourteen hours to themselves; eight hours is abundance for sleep; this leaves six more at their disposal. What shall they do with these six hours? Some, doubtless, with large families, would have to employ a portion of their time about their homes; those with small families or with none, could, with reasonable diligence and ambition, aided by the Institute, acquire in this spare time, a degree of knowledge sufficient to fit them for any pursuit or position in life; provided that the means are made accessible, so that they can pursue their studies at those hours when they are not compelled to labor.

The Mechanics' Institute, organized and conducted on the plan we have indicated, with good teachers, would enable all to avail themselves of that which is power—human knowledge; whilst it would tend to elevate the character and standing of those engaged in the mechanic arts, for with character and power comes their attendant—*respectability.*

When we contemplate, for an instant, what were termed the free cities of the Middle Ages, in Germany, Italy, France, and England, and see what artisans, traders, merchants, and laborers, enjoying limited corporate privileges, could accomplish in ages of comparative barbarism and ignorance, we have a forcible illustration of what numbers *can do*, when associated for the purpose of achieving a common and definite object; and when we trace the rise and progress of these corporations still further, and see them battling down the strong arm of feudal power, and sowing the seeds of democracy and civil liberty—lights heralding the dawn of modern civilization—even we, at this day, and in this country, can feel gratitude towards those who were the first, through the combined power of numbers, to break through the charmed circle of despotism—the rule of an iron aristocracy. Why shall not our mechanics learn wisdom from the past, and in this age, when social organizations seem to be the order of the day, organize upon such a basis as to place mechanism and mechanics in their true

position: that of being second to no other business, calling, profession or class? This can be done; let but a few of the right spirits take hold of it, and organize the Mechanics' Institute upon principles that will authorize every mechanic in the west to look to it as *his* College—as an institution of learning accessible to him and to his. Do this, and you will have accomplished half the task. You will have sown the seeds of a proper and generous pride, and self respect, which shall germinate and bring forth rich fruit.

We know there are difficulties in the way; but let us remind our readers that nothing good or great is ever accomplished without great effort. That which is easy of attainment the commonest mind may grasp; it is only the bold, persevering and energetic who accomplish things worthy of manhood.

In making these suggestions, however, we would not be understood as proposing any thing which might lead to distinct classes in society. On the contrary, by increasing the educational facilities of mechanics, and giving them the means of acquiring an education, and improvement in their respective arts, social distinctions, and the barriers to personal intercourse will be broken down. We hold that the perpetuity of our free institutions, and the advancement of civilization in the best meaning of the term, must depend mainly upon a free, unembarrassed social intercourse in private life, between all citizens, of whatever degree, trade, profession or calling; that the only ground of exclusion should be *vice*, and not the kind of labor a man happens to perform in the acquisition of the means of living. Such an unembarrassed social intercourse would be alike beneficial to all classes, as it would tend to break down that narrow-minded prejudice and bigotry which is felt by individuals who associate with one particular class entirely. At the same time, each particular class would impart its peculiar ideas to the others. The result would be that the mental vision of society would be enlarged, and there would be a homogenity in its parts, that would lead to new and glorious achievements in the onward progress of civilization.

If the mechanics of St. Louis would go to work vigorously, and organize their Institute, other towns and cities in this portion of the west would be induced to follow their lead. Thus, in a short time, there might be laid the foundation for a new condition of things in society.

Another important consideration in this matter, is the fact that it is practically carrying out that much talked of, and generally admitted principle, that the blending of physical exercise with mental labor is essential to a vigorous intellect, discriminating judgment, good health, and good morals. Then let the true practical test be made, and let the man of toil have a chance in the arena of intellectual struggle and achievement. Give him a chance to enter as an equal in the world of thought, with his iron nerves and thews of steel, and see whether his mind will not play as vigorously as his arm that wields the sledge hammer.

ART. IV.—SCOTTISH AGRICULTURE.

BY G. B. DAVIDSON, OF ILLINOIS.

Manuring, how essential—Farm manure, how prepared, &c.—Lime, how used—Its effects—Not to be used without other manure—Bone manure, how prepared and used—Price—Quantity used per acre—Guano, where found and what it is—Its effects—Cost of manuring per acre—Fish brine and salt, how used—Intestines of fishes—Quantity used per acre—How used—Salt water, how used—Remarks on stock—How fed and kept—Value of, weight, &c.—Sheep.

As a carpenter is known by his chips, so is a farmer by his collection of materials for manure. This is literally true of the Scotch farmer; for with him, manuring is as necessary as ploughing and sowing. He would as soon think of making his horses work without food as to make the land yield crops without manure. Experience has proved that the one is as impracticable as the other. Manuring is, therefore, a matter of primary importance; and in the present paper we shall endeavor to describe some of the different kinds of manure in use, with their manner of preparation, &c.

The manure to which the attention of the farmer is first directed, is that which is produced on the farm, from stock and otherwise. This requires no immediate outlay of money; and it also has the advantage of being the most convenient. Cattle, whether kept in stables, sheds, or folds, are littered with as much straw, or some other substitute, as they can possible waste. The manure thus produced is carefully preserved, and prepared for the fields. In winter, when nothing else can be done, it is hauled to the fields on which it is to be used in the spring, and put up in large hills, in the most central places. In this state it remains till within three or four weeks of the time it is to be used, when it is turned over, well loosened, and covered on the top with fine earth. In this state it becomes heated, when it is in the best condition for applying it to the land. After it is scattered on the surface, it is ploughed down as fast as possible, so as to prevent it from losing its moisture. This kind of manure is used in raising every kind of crops, which the country is capable of producing, and is the only manure used by many farmers, particularly of the poorer class, who have not the means of purchasing any other.

Lime, if it can be called a manure, is the next most extensively used article, for agricultural purposes. The abundance of limestone, and the cheapness of coal, causes lime to be very cheap—seldom as high as twenty cents per bushel. It is applied in many different ways—sometimes it is mixed with moss, and spread, during the latter part of summer, on the meadow which is to be ploughed in the autumn. Sometimes it is put on the turnips, after the plant is sufficiently strong, and immediately before hoeing the second time. When applied in this way it is slacked, and kept as dry as possible, so as to make it spread with ease. It is also sometimes mixed with farm manure, and in some other ways which it is not important to notice.

The quantity of lime for an acre, varies according to the quality of the soil. If light and shallow, the quantity must be small; otherwise the land will be burned, and produce little or nothing. Barley, rye and grass, are the only crops which can be raised on over-limed land; and even of them, nothing like an average crop can be produced. The writer has seen patches, twenty years after the lime had been applied, which would produce no other crop. Where the soil is deep, however, and of a clayey quality, lime may be used more freely. But how small soever the quantity, it never fails of doing good service. The farmers calculate that, as a general thing, the first and second crops after liming, pay all expenses. Lime, besides producing good crops, is believed to be a preventive of worms and bugs.

Good as the effects of lime may be, the farmer who limes does not in consequence, fail to manure. The regular quantity of manure must be used, or liming is of little consequence. Lime does not strengthen or enrich the soil; it but acts as a stimulant, to turn its strength and richness, whatever that may be, to the best account; consequently, it is indispensable when lime is applied to give the land a thorough manuring.

Bone manure is also extensively used. This manure is prepared from every variety of bones, ground to the size of beans, or smaller, in a machine made for the purpose, called a "bone mill." This manure generally costs about four shillings and sixpence sterling, or $1 20 per bushel. Twelve bushels are sufficient for an acre of turnips, if planted with a dibble on the top of the drills, before the seed are sown; but if spread in the ruts and covered in with the plough, about forty bushels is necessary. The latter quantity will, in an ordinary season, produce an excellent crop of turnips; afterwards one or two good crops of grass, and a good crop after meadow.

Carbon and plaster of Paris are used, though not extensively, it being considered of more utility to use something else.

Of late, guano has been introduced, and is extensively used. This manure, supposed to be the excrement of wild fowls, is found on the coasts of Africa, and in South America, in Chili, Peru, Chinche, &c.* We cannot describe the effects of guano better than by quoting an extract from a letter, received from an intelligent farmer in Scotland, dated 17th of January last. The writer says:

"Guano is now used here, both for green and grain crops, to a great extent; and raises extraordinary crops on all sorts of land, at an expense of about twenty shillings an acre."

Brine, in which fish has been preserved, is used to a considerable extent, and found of great value. It is frequently poured on the top of the hills of matter collected for manure, until they are well saturated; and where brine cannot be procured, salt is not unfrequently mixed with manure. Salt, however, is too dear to be used in this way very extensively.

Another excellent manure for those who are convenient to fishing towns, is the intestines, heads, &c., of fishes; and such fishes as are unfit for the table. A great number of what is called "dogs," or dog

*For a full description of guano, see supplement to Ure's Dictionary.

fish, are caught in the herring nets, which are used only for manuring land. The price of this manure varies according to the fishing season. Before the fishing season commences, the farmers contract with the fishermen for all the *entera* of the fishes, and such as are worthless for other purposes; consequently, when the take of fishes is great the farmers' part is proportionably great. This manure is the very best that can be put on land. When mixed with two-thirds of sea-weed, moss, or any other manure, twenty cubic yards of the mixture is sufficient for an acre; and will produce, on any soil, an extraordinary crop.

All kinds of sea-weeds are good for manure, and some farmers haul salt water a great distance, and pour it on their fields, and on substances collected for manure; and we never heard any complain, that in doing so they labored in vain.

In closing this part of our subject, we would add, that there is nothing which the Scottish farmer allows to go to waste. What is fit for nothing else is converted into manure, and every thing which will make manure is considered valuable.

The raising of stock is a very important branch of husbandry with the Scotch farmer; for it is on stock he chiefly relies for the payment of his rent. If grain enough can be sold to pay incidental expenses, it is as much as the farmer expects. Hence he depends entirely on his stock to discharge the landlord's accounts which, as was shown in a previous article, is no inconsiderable item.

The first consideration in stock raising is to procure the proper breed, that is, the breed which is the most fashionable, and which will command the highest price when selling. And here we would remark, that it is not always the best breed of cattle which is most in vogue, nor that which is kept with least expense; but frequently the very reverse. Why it is so we know not; no more than we know why one month overthrows the fashions of its predecessor. Once the "Dun Robbin breed was all the fashion. They are short legged, compactly built, and require but a small quantity of food—they do not grow large; but weigh very heavy to their size. The cows give a fair quantity of milk, of an excellent, rich quality—making more than an average quantity of butter, compared with the milk of other cows; and we think it would be difficult to find a breed of cattle which, in the whole, would be so profitable to the farmer. But the Dun Robbins are out of fashion; and so are almost every kind except the "Tease Water." They are a very large, long legged, gaunt, raw boned, kind of cattle; and require a great quantity of food; at least one-third more than the Dun Robbin. The cows give a great quantity of milk; but so poor and watery, that it is scarcely fit for anything. It yields very little cream, and of course very little butter. Yet such is the estimation in which they are held that, at the cattle shows, they are generally awarded all the prizes. So far as the *Highland Agricultural Society* is concerned, this is not the case. At its shows they are not allowed to compete with other cattle.

In taking care of stock, comfortable stables are provided. There is no such thing as cattle laying out in the snow, or standing shaking in a cold pen, by the side of a rail fence, eating their food. The sta-

bles and sheds, in which cattle are kept, are built of rock, and cleaned regularly every morning and evening, and the cattle well littered with straw, or something else provided for the purpose; so that one could scarcely tell, only for seeing the cattle, but that he was in a well kept livery stable. They are fed as regularly as the farmer himself; not much at a time, but often, four or five times a day. The first thing in the morning is to feed the cattle, and frequently the last thing at night.

On what is called a well stocked farm, one-fourth, or a fraction over, are cows; one-fourth one year old; one-fourth two years old; and one-fourth three years; omitting to count calves till a year old. A farmer therefore who can keep ten cows, has ten head of cattle to dispose of every year. And if he is able to feed them the third winter, they will bring the highest price. Suppose he feeds ten, each weighing forty stone, a fair average weight for cattle three years old; and dispose of the same at five shillings per stone, which is about the average price, the amount of cash he would receive for the whole would be £100 sterling, which, to say nothing of what is made from the cows, would pay the rent of a snug little farm.

We have little room to speak of Sheep. Those who go extensively into this branch of business, keep them on the hills during summer, where their principal food is the bloom of the heath, and bring them to the plains during winter. The business is profitable were it not that in winter, great numbers are lost in the snow.

ART. V.—HISTORY OF THE AMERICAN FUR TRADE.

BY J. LOUGHBOROUGH, ESQ., OF MISSOURI.

CHAPTER I.

Origin of the Fur Trade—Discovery of Canada—Cartier—DeMorts—Champlain—Traffic with the Indians commenced—Origin and character of the Courier de Bois—Facility of forming savage habits—Immorality of the Courier's de Bois—The license system—Discovery of Hudson's Bay—Grosseliez—Charter of Bay Company—Deficiency of organization—Their slow progress—Voyages of Knight, Barlow, Middleton, and Moore and Smith—Wars with French traders—Treaty of 1763—Cession of Canada to the English—Journey of Carver—The Yazoo Indian's trip—Journeys of Hearne—Incidents illustrating Indian life and character—Return of Hearne.

It is a singular and striking manifestation of the wisdom of Providence, in educing good out of evil, and rendering the worst passions of human nature subservient to the ends of virtue, that the fur trade, which had its origin in vanity and avarice, has, nevertheless, essentially contributed in many ways, to the lasting welfare of mankind.

From the earliest period, the passion for the finer furs, as ornaments, has existed among nations of northern origin, as that for jewels and precious stones has characterized those of southern regions. Time, conquest, and emigration, have changed the relative positions of people, but not their tastes; and now we see a thousand characteristics singularly out of harmony with the localities in which they are found. It is thus that we see the taste for furs, as articles of dress and ornament, transplanted by the Turks and Tartars into southern Asia and China. The simple fact that certain animals wear a skin covered with soft and rich fur, with which princes and nobles love to be decorated, and that there have been men so devoted to the love of lucre as to undertake the most hazardous voyages and journeys, and encounter the most imminent dangers to profit by this passion of the great, has contributed in an inconceivable degree to the advancement of science, the spread of true religion, the improvement of commerce, and the progress of civilization. The founders of the fur trade, (without certainly being impelled by such motives,) have brought to the knowledge of the world boundless deserts, and almost impenetrable forests; and an accurate account of the manners, customs and habits of millions of human beings previously unknown to the civilized world. By introducing a knowledge of the capabilities and resources of these wild regions, a boundless field for an incalculable amount of commerce has been opened up. By informing the philanthropic and the pious of the true situation of vast masses of benighted and suffering fellow creatures, they have induced thousands of zealous and pure minded missionaries to carry the true religion of the cross into regions destitute alike of earthly comfort, and of future well founded hope. By giving the assurance that the cultivators of science might follow their footsteps in safety and security, they have contributed to introduce an inestimable amount of useful knowledge in every department of natural science. Astronomy has been greatly advanced; geography extended, until at this time scarce a spot upon the globe remains unexplored; geology, that infallible guide to the physical history of the past, and the agricultural success of the present, has found in these wild regions, some of her most valuable treasures; botany, zoology and ornithology, have been enriched with vast discoveries; and above all, and more than all, the world now fully understands to what ends, and by what means, its efforts must be directed in furtherance of the great mission of civilization. It may be true that population would, in the course of time, have spread over all these regions; but its progress is naturally slow—men reluctantly leave the confines of civilization, without some assurance of the character of new lands, and centuries might have elapsed before the surge of population would have swelled to the shores of the Pacific. In that period, how much would have been lost of inestimable value to the comfort, the happiness and the intellectual advancement of mankind! And how deeply is it to be deplored, that so many signal benefits, should have been purchased by the sacrifice of the lives, the morals, and the health of thousands of harmless beings, for whose protection all the safe-guards of law, and all the military force of several governments proved wholly unavailing. But the best grand results, and the most benefi-

cent designs of Providence, are always more or less polluted by the evil passions of mankind, and we have reason to be fervently thankful, that in spite of these evil passions, the benefits resulting from the fur trade, have far overbalanced its injuries.

Francis the First of France, a high-minded, chivalrous and ambitious monarch, eager to cope upon equal terms with his illustrious rival, Charles the Fifth, fitted out several expeditions for maratime discovery. The second of these great voyages was entrusted to the command of Jacques Cartier, who was selected by the Sieur de Millerays, Vice Admiral of France. The event justified the choice; for Cartier proved himself one of the most intelligent, courageous and prudent commanders of an age fruitful in heroic spirits. He sailed from St. Malo in 1534, with two ships. He penetrated for the first time into the Gulf of St. Lawrence. The advanced season, however, compelled him to return to France. Meeting there with a flattering reception, he resolved again to embark and prosecute his discoveries up the river St. Lawrence into the interior of the contineni. His squadron consisted of three ships. They weighed anchor in May, 1535, and steered for New Foundland. On his former voyage he had induced two of the natives to return with him to France. As soon as he entered the mouth of the river, these natives informed him that it ran through a great Continent with large lakes. He proceeded up the river as high as the point where the city of Montreal now stands, where he found a large Indian town, built of logs and bark, and surrounded by breast works. After remaining some time, he again sailed for France.*

Like his illustrious predecessor, Columbus, he received ingratitude instead of reward; but the authors of it were punished by a providential failure of several successive expeditions towards the rich land he said he had discovered. Cartier himself, was subsequently lost in a voyage undertaken upon his own account. At length, after a number of abortive attempts at discovery, and colonization, *DeMonts*, a gentleman of Santoigne, about the end of the sixteenth century, fitted out an expedition for *New France*, as all northern America was then called. *DeMonts* himself, was finally tempted into piracy, but Champlain, his second in command, proved true to his trust. He founded and fortified a town on the present site of Quebec, reduced the neighboring country to cultivation, and headed a number of expeditions into various portions of the interior. It is no part of our object to enter upon the details of these French geographical discoveries—deeply interesting as they are—save in so far as they are incidentally connected with the rise and progress of the fur trade.

This first permanent settlement of the French in Canada, was the nucleus around which, in the course of time, a multitude of other small colonies were collected. Finding a large demand in Europe for the finer furs, and that the country abounded in animals bearing them, they immediately opened a traffic with the natives, giving to

*Cartier made a third voyage, in which he fancied he had discovered gold and diamonds. His collections, however, were only limpid quartz and golden yellow mica, mistaken in that ignorant age for gold and diamonds.

them trinkets, and coarse and cheap articles of clothing and cutlery, in exchange. At first, when the wild animals were abundant, and the Indians numerous and powerful, the white traders contented themselves with remaining in their towns, on the banks of the St. Lawrence, and purchasing the skins brought to them by the red men. As the supply diminished, and as the Indian tribes became thinned, corrupted and weakened by the destructive proximity of civilization, the traders found it their interest to penetrate the recesses of the wilderness and barter with the hunter within his own territories. The individuals who undertook this task, were a class of hardy adventurers, who joined the savages in their villages, married wives among them, adopted with wonderful facility their habits and customs; and engaged with them in their hunting excursions, sharing the proceeds. Their distant inland expeditions (or voyages, as they called them,) frequently occupied as much as twelve or eighteen months. It is astonishing how much easier it is for the most civilized being to descend into barbarism, than for the most intellectual savage to rise into the civilized state. In the first case, twelve months uninterrupted association with savages, almost uniformly effects the result; whilst we believe there is no example in history of a grown savage having been converted into a civilized being. Generations of contact alone can accomplish it. On this point we have read much of conjecture and speculation. To our mind the reason is clear and satisfactory. Civilization is the creation of the reason, and implies a conquest over the passions and the appetites; barbarism consists in the almost undisturbed reign of the latter. The one state requires a constant and steady effort of mind, the other requires none. The one is a rational condition—the other an impulsive one. The one is a condition of necessary restraint; the other of entire freedom. We confess it is easier to conceive than to express the distinction, but the two conditions of the mind and feelings we have *experienced.*

These daring men had to encounter every form of toil, hardship, and danger. They had to associate with savages, selfish, brutal and treacherous, intellectually; and depraved as they were morally, even their inferiors—beings with whom they could feel no sympathy, towards whom their only relation was a mutual struggle to murder, to cheat, and to plunder. Under these circumstances, free from all the restraints of law and of public opinion, the *Courier des Bois*, as they were called, rapidly degenerated into intelligent and cunning beasts of prey; combining the foresight, steady perseverance, and the powers of combination of the white, with the rapacious, unscrupulous and unprincipled ferocity of the Indian. So fatal was their example to the morality of the natives, and so serious an impediment did their course of conduct become to the pious and zealous efforts of the missionaries to infuse into the Indians the pure principles of the gospel, that at their urgent solicitation an ordonance was published prohibiting all persons whatsoever from entering the Indian territories without a license, and making the continuance of the license depend upon their conduct.* In the state of society then existing this remedy was

*Sir Alex. Mackzenzie, page 1 to 3.

of course nearly nugatory. Even at the present time, a similar system more strictly guarded, is found almost impracticable to enforce.

In the year 1708, Henry Hudson re-discovered the Strait connecting the great Bay, which bears his name, to the Atlantic. Through this Strait he entered the Bay, where his crew mutinied, bound him, and put him with his adherents, the sick and the wounded, into a shallop and then made sail. He was never heard of more.

This voyage of Hudson was followed by a number of others, the leading objects of which were to penetrate into the Pacific through some of the inlets of this Bay, or to discover a north-west passage into that ocean. The last of these voyages, previous to 1668, were those of Fox and James; and their crews disseminated on their return such glowing accounts of the abundance of rich furs, that they excited the interest of Grosseliers, an enterprising individual, who undertook a voyage to survey the country, and laid before the French government a scheme for a settlement. The Minister rejected the scheme as visionary; but Grosseliez having obtained an introduction to Prince Rupert, then in Paris, obtained through his interest with the English King, a vessel which sailed in 1668, and penetrated to the top of James' Bay. Here they erected Fort Charles on Rupert river. In the succeeding year, Prince Rupert, with seventeen others, were incorporated into a company. To this company Charles the Second gave and granted in fee, as lords of the soil, all the territories on the coasts and confines of all the seas, lakes, and rivers, within Hudson's Straits, not actually in the occupancy of any other prince or state, together with the sole and exclusive right of trading with all the inhabitants thereof. The leading motive of the King, was to further the efforts for the discovery of the northwest passage, and the duty of aiding and assisting in these efforts, was expressed as a condition in this charter.*

This company accordingly commenced operations, but their organization was so deficient, that it made but slow progress in its attempts to rival the French in Canada. Its commandants and clerks had all fixed salaries, were without a prospect of future promotion, and were consequently without any motive to stimulate them, beyond the performance of their specified duties. The hands or voyageurs, were usually Orkney men, or men from some other of the Scottish Isles, whose inflexible dispositions and fixed habits, illy adapted them to an intercourse with a new and savage race of people. Accordingly we find that in 1749, nearly eighty years after, the granting of their charter—although at that period the animals were abundant—an attempt was made to deprive them of their charter, on the ground of *non user*: and the consequent investigation demonstrated that they had accomplished very little. They possessed at that period only four small and badly constructed forts, manned by one hundred and twenty men. They only realized a nett profit of about $25,000 per annum. At the same period the furs imported into Rochelle, from Canada, yielded to the French traders a nett profit of about $100,000.†

*Macpherson's Annals of Commerce, v. 2, p. 555. See also the Charter.

†Report of Committee of the Commons, reprinted in 1803, and Anderson's History of Commerce, v. 3, p. 237.

Previous to the peace of 1763, the only efforts made by the company to fulfil the condition of their charter, respecting the northwest passage, were the voyages of Knight and Barlow, in 1719; of Middleton in 1742, and of Moore and Smith in 1746. The vessels of the first were never heard of; those of the second returned without accomplishing anything of note, and the last expedition was, if possible, of less consequence still.

By the treaty of Ryswick, in 1697, it was provided that the Hudson's Bay territories should belong to France; but if the exact line was drawn as provided for in the treaty, it was never fairly understood or recognized by the Canadian French. Consequently, from this period up to the treaty of Utrecht, in 1714, a state of quasi war existed between the French traders and the Bay Company; and the latter were several times dislodged by the former; and as the latter treaty provided for commissioners, whose action was not heeded, this war continued until 1765. Fort Churchill was erected in 1733, in defiance of treaty—strongly fortified and mounted with 40 pieces of cannon; but it was, nevertheless, taken by LaPayrouse.*

By the terms of the treaty of 1763, Canada, together with all the other dominions of the King of France on the continent, east of the Mississippi river, except only the narrow strip between that river and the Ibberville, and Lakes Maurapas and Pontchartrain, were ceded to Great Britain. This treaty was signed at Paris. The region extending southwest from Hudson's Bay to the great Lakes, and the heads of the Mississippi, had long been frequented by the traders from Canada, and had been partially surveyed by French officers and missionaries. This region was also visited, in 1766, by Jonathan Carver, a native of Connecticut. The object of Carver was to ascertain the breadth of the continent, about the 46th parallel, induce the government to establish a post somewhere west of the Mississippi, and thus facilitate the discovery of a northwest passage. In his journal is to be found the *first mention of the Oregon river, by any English trader or traveler.* He derived his account of it from the Indians. Pecuniary embarrassments prevented the prosecution of his scheme.

One of the strangest adventures which has been preserved to us of that period, is recorded by the French traveler, Lepage Dupratz. A native of the Yazoo country, named Monchactabe, having taken a roving fit into his head, deliberately set out, followed the Missouri river to its head, crossed the mountain barrier, and pursued his course down the Columbia a considerable distance. Here he was checked by the existence of a war between the tribe with which he found himself, and another much lower down. He stated that he was there informed that the stream which he had descended emptied into a great water, where ships had been seen, navigated by white men with beards. All the circumstances related by him correspond so well with facts since discovered, that there is little room for doubt, of the truth of this Indian's story, of his extraordinary adventures. He was absent on this expedition upwards of five years.†

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*Cox's Narrative.

†This account is to be found in the Abbe de Maserier's Memoirs Seur la Louisiana.

The first actual discovery of a river emptying into the Arctic Sea, was made by Mr. Samuel Hearne, one of the agents of the Bay Company. The plain, simple narrative of his journeys, as written out by himself, is one of intense interest. The difficulties and dangers of such a journey in these high latitudes, are inconceivable to those who have not read with attention many accounts of them. The scheme was set on foot professedly for the purpose of northern discovery, to redeem the Bay Company from the reproach of having entirely neglected to fulfil the conditions of their charter; but the real purpose was to ascertain whether the Indian tales relative to rich mines of copper in the north, were true. Hearne made, between 1769 and 1772, three journeys from Prince of Wales Fort, on Hudson's Bay, near the 60th parallel. In his second journey he went as far as White Snow Lake, in 64 deg. Here the accidental destruction of his quadrant compelled him to return. Some idea may be formed of the privations endured in this journey, from the following extract:

"To record," says Hearne, "in detail, each day's fare since the commencement of this journey, would be little more than a dull repetition of the same occurrences. A sufficient idea of it may be given in a few words, by observing that it may justly be said to have been either all feasting or all fasting. Sometimes we had too much, seldom just enough, frequently too little, and often none at all. It will be only necessary to say that we fasted many times two whole days and nights, twice upwards of three days, and once, while at Shenanee, near seven days, during which we tasted not a mouthful of anything except a few cranberries, water, scraps of old leather, and burnt bones."

On these occasions, Hearne often saw the Indians examine their wardrobe, which consisted chiefly of skin clothing, considering what part could best be spared, when sometimes a piece of half rotten deer skin, and at others a pair of old shoes, would be sacrificed to alleviate extreme hunger.

On his return he met Matonabbee, an intelligent chief, who had advised the journey. The Indian's notion as to the real cause of Hearne's failure, is amusing and characteristic enough. "In an expedition of this kind," said he, "where all the men are so heavily laden that they can neither hunt nor travel to any considerable distance, in case they meet with success in hunting, who is to carry the meat? Women were made for labor; one of them can carry or haul as much as two men can do. They also pitch our tents, make and mend our clothing, keep us warm at night, and, in fact, there is no such thing as traveling any considerable distance, or for any length of time, in this country, without them; and yet, though they do every thing, they are maintained at a trifling expense; for, as they always act the cook, the very licking of their fingers in scarce times, is sufficient for their subsistence."*

On his third journey, Matonabbee accompanied him with seven of his wives. On the 21 of March, they arrived at the Doobaunt Whole

*Hearne's Journey, page 55.

river, where they found a large encampment of northern Indians. They found a plentiful subsistence by catching deer in a pound. Their method of accomplishing this, is to find a frequented deer path, and enclose with interwoven trees and brushwood, a space near a mile in circumference. The entrance of this circle is the size of a common farm gate, and the inside is crowded with thickets of brush, between which are set snares of well twisted thongs. On each side of the entrance, a fence of limbs and brush is started and run out, spreading apart as they proceed, to the distance of one, two or three miles, like the wings of a partridge net. Between these rows run the paths commonly used by the deer, When every thing is prepared the Indians take their station on an eminence, commanding a view of this path, and the instant any deer are descried in the right position, the whole village, men, women and children, steal under cover of the wood, until they attain a position in the rear. They then draw up in the form of a crescent, and advance with shouts. The deer are thus driven forward until they get into the pound. The entrance is immediately closed by the Indians, the women and children run round the outside to prevent them from leaping the barrier, and the men enter the circle with their bows and spears, and speedily despatch the victims.*

At Cloyey the expedition was joined by nearly two hundred Indians. This occasioned a terrible misfortune to Matonabbee, for two of the handsomest of his wives here eloped to rejoin their former husbands. But this was not the worst. There exists an extraordinary custom among these northern Indians by which the men are permitted to wrestle for any woman to whom they may take a fancy, and if victorious, they carry off the belle, whether she be married or single. An Indian here entered the camp from whom Matonabbee had purchased one of the stoutest and therefore most valuable of his wives, and demanded to wrestle for her according to custom. As Matonabbee knew he had no chance of success with an adversary so athletic, he was fain to avoid the difficulty by re-purchasing his wife. This he did with evident mortification and ill humor. It may be easily conceived how inconvenient this queer custom must be. A weak man has no chance to retain a wife at all—and even a strong one has no security against being overpowered at any time.†

At length the party arrived at Copper Mine River, and here Hearne beheld one of those terrible butcheries so characteristic of savage life. The inducement for the Indians to accompany him was the hope of waylaying and cutting off parties of the Esquimaux, with whom they had a feud. Soon the spies reported that they had seen five tents about twelve miles below. Instant preparation was made, and it was determined to steal upon their victims. It is surprising how much of unanimity, order and discipline these red devils preserve, whenever a deed of blood is to be done, although at other times they are continually wrangling. Each man first painted his target, some with a representation of the sun, others of the moon, and several with pictures of beasts and birds of prey, or of imaginary beings, which they affirmed

*Hearne, p. 78-80. †Hearne, p. 93.

to be denizens of the elements, upon whose assistance they relied. They then moved with the utmost stealth towards the tents, taking care not to cross any of the hills which concealed their approach. When they arrived within two hundred yards they made their last preparation. They tied up their long black hair in a knot behind; painted their faces black and red to give them a hideous appearance; rolled up their sleeves; and some to render themselves light for running, threw off their jackets and stood armed naked to the breech cloth. At about one o'clock in the morning they rushed from their concealment with yells of fury. The unfortunate Esquimaux, men, women and children, hastened out of their tents and attempted to escape, but they were surrounded and all were murdered in cold blood. "The shrieks and groans," says Hearne, "of the poor expiring wretches, were truly distressing; and my horror was much increased at seeing a young girl about eighteen years of age killed so near me that when the first spear was struck into her side, she fell down at my feet and twisted round my legs so that it was with difficulty that I could disengage myself from her dying grasp. As two Indian men pursued this unfortunate victim, I solicited very hard for her life, but the murderers made no reply till they had struck both their spears through her body, and transfixed her to the ground. They then looked me sternly in the face and began to ridicule me by asking "If I wanted an Esquimaux wife," while they paid not the smallest regard to the shrieks and agony of the poor wretch who was turning round their spears like an eel.*" In this journey Hearne followed the Copper Mine river to its mouth, where he observed the tides, and the relics of whales. From thence he returned by way of the Athabasca Lake. In this neighborhood they discovered by accident, a young Indian woman who had lived entirely alone in a small hut, for eight months. She had been taken prisoner by the Athabasca Indians, and attempted to escape to her own people, the Dog-ribs, but had gotten lost. She had six inches of hoop iron made into a knife, and an arrow-head for an awl. For subsistence she snared partridges and rabbits. She seemed quite contented. Hearne reached the fort in June, 1772, after an absence of near eighteen months.

CHAPTER II.

Rivalry of English and French traders—Rise of the Northwest Company—Its efficient organization—Remotest northwest Fort—Inactivity of the Bay Company—Energy of the Northwest Company—Their ill conduct to the Indians—First visit to the Rocky Mountains—Mackenzie's first voyage—Singular Indian superstition—His discovery of the Arctic Sea, and return—His second voyage—Mountain scenery, &c.—Indians—Frazer's river—Land journey—Indians—Indian village on northwest coast—Their houses—Extraordinary religious temple—Chief's canoe—The Pacific Ocean—Fidler's trip—Frazer's voyage—Trading post west of mountains—Selkirk's Settlement—War of the rival Companies—Destruction of Selkirk's Colony—Act of Parliament—Treaty between the Companys—New charter—Re-establishment of Red River Colony—Ross Cox—Scrimmage at the Portage de la Montagne.

THE charter to the Hudson's Bay Company does not define with much precision, the boundaries of the territory granted in fee to them.

*Hearne, p. 184.

Hence, subsequent to the treaty of 1763, the same rivalry continued to exist between the Canadian traders and the Bay Company, which had originated prior to that treaty; and whilst on the one hand the Company laid claim to an almost boundless territory, their opponents were for confining them strictly within the letter of their charter; and this was vague and indefinite.

For more than thirty years the regions north and west of Lake Superior, had been frequented by French adventurers, when some enterprising merchants of Montreal, in 1775, penetrated as far as the sources of the Saskatchawan and Athabasca rivers. These individuals, however, experienced much annoyance from the employees of the Bay Company, with whom they soon found themselves unable to contend separately. Consequently, in the year 1774, they united their interests, and assumed for their association the title of the "Northwest Company of Montreal." Other small associations were formed about the same time, but they were all finally absorbed by this one. Its most prominent founders were British and Canadian merchants, among whom Messrs. Rocheblave, Frobisher, Frazer, McTavish Mackenzie, and McGillivray were the most prominent. These men had all been engaged in this trade individually, or as members of lesser companies—were intimately acquainted with the character of the Indian tribes—the topography of the country, and all the best methods and means of carrying on a thriving and profitable trade.

The organization of this new company was altogether in contrast with that of their rivals. The number of the shares was at first sixteen; it was then increased to twenty, and finally to forty. A certain proportion of them were held by the *agents*, residing at Montreal, who furnished the capital; the remainder were divided among the *proprietors*, each of whom took charge of an interior trading post. The clerks were chiefly younger branchs of respectable Scottish families. They entered the service as cadets or apprentices for seven yaars; after which they were placed upon salaries, which, with prudence, would yield a certain profit; and finally, if their conduct was good, they were received into the company as partners. Thus their ambition and their hopes were stimulated. In addition to this improvement of oaganization, they universally employed the descendants of the old *Courier de Bois* as *voyageurs*, or *canoe men*, in preference to all others; and incouraged them by hopes of advancement in station or pay, and of pensions in their old age. These *voyageurs* were admirably calculated by habit, education and natural disposition, for the stations in which they were employed. Passively obedient to their superiors, patient and persevering in their temper, gay, reckless, and thoughtless in their habits, capable of enduring an inconceivable amount of fatigue, and endowed with a wonderful aptitude for sliding into and adopting the characteristics of the Indians, they were of all men, the best fitted to ensure success to such an enterprise.*

Before the formation of the North-west Company, the remotest trading establishments of the British was on the Athabasca or Elk river,

*Irving's Astoria, and Ross Cox's Narrative.

about twelve hundred miles north-west of Lake Superior, which had been founded by Messrs. Frobisher and Pond, in 1778.

When this new company first went into operation, the Hudson's Bay Company, with the characteristic inactivity of an ancient corporation guarded by charter, remained quietly at their posts, as the earlier French traders had done, and purchased such skins as the red man chose to bring them. The North-westers, on the contrary, penetrated the forest, passed the mountain barriers, sailed over the lakes, alarmed the Indians by their vigor and force, (to their eternal shame be it said,) destroyed them by their supplies of spirits and fire arms; and for a considerable period might be almost considered as masters of the continent between the Rocky Mountains and the great lakes of Canada. The fur trade, conducted as these men conducted it, was necessarily a decaying trade. The traders and Indians were solicitous only for immediate gain, and careless of the future. They slaughtered indiscriminately, the male and the female, the full grown and the whelp, without even much regard for the season; and of course, the trade became much more destructive and much less productive every year. As fast as their original hunting grounds became exhausted, this company pushed their posts and trading parties to the westward. It was a consequence of this course of policy, that the two great expeditions of Sir Alexander Mackenzie were made.

Before entering upon these expeditions, we ought to remark, that about the year 1789, a trading party had passed westward to the *Shining Mountains*, as they were called by the Indians. Here they were driven back by a force of hostile Indians.*

The Athabasca Lake is a basin thirteen miles in width, and two hundred miles in length, connected to the great Slave Lake by the Slave river, and supplied by the Peace river from the Rocky Mountains, and the Athabasca from the south. It is in latitude 59 deg. On its south-west end, Fort Chypewyan is situated.

From this fort Meckenzie started upom his first expedition in 1789. We regret that our space will not admit of our making liberal extracts from his journal. He was a man of fine intelligence, and of great vigor, courage and perseverance. He passed down the Slave river into the great Lake of that name, from the north-west extremity of which he found that a great river flowed, to which he gave his own name, which it bears to this day. To the mouth of this river he resolved to go. He accordingly entered the stream with his canoes, and in five days came to a camp of Slave and Dog-rib Indians. They asserted "that monsters of horrid shapes and malignant dispositions, had their abodes in the rocky caves on the banks, ready to devour whoever approached." Besides, they affirmed that it would take "several snows" to make the journey. One of them, however, was bribed to accompany him. Previous to his departure, a singular ceremony took place: "With great solemnity, he cut off a lock of his hair, and dividing it into three parts, fastened one to the upper part of his wife's head, blowing on it thrice with the utmost violence, and uttering certain words as a charm. The other two locks he attached,

*Greenhow.

with the same ceremony to the heads of his children." These Indians are described as a "meagre, ugly, and ill favored race; particularly ill made in the legs." A few old men had beards, a circumstance not common with Indians. Their cheeks were tattooed with two double lines, and their noses pierced for a quill or bone. Their clothing in winter was gorgeous, consisting of skins and furs, dressed with the hair on, and richly embroidered with quills. These Indians had never seen any whites, and were destitute of metalic implements. On the 11th of July, they landed at a deserted encampment of the Esquimaux. They found three houses, "the ground plat of which were oval, about fifteen feet long, ten wide in the centre, and eight at each end; the whole was dug about twelve inches below the surface, one half being covered with willow branches, and probably forming the bed of the whole family." The whole structure was formed of drift-wood, willow and grass. Soon after he reached the mouth of the river, and beheld for the first time, the great Arctic Ocean, filled with mountains of ice, between which the whales were engaged in their sports. The next day he commenced his return, by the same route, and arrived at the fort after an absence of 102 days.

On the 2d day of October, 1792, Mackenzie set out upon his second journey. He launched his canoe upon Peace river. Her dimensions were twenty-five feet long within, exclusive of the curves of stem and stern, twenty.six inches hold, and four feet nine inches beam. She was so light that two men could crrry her with ease. In this batteaux he stowed 3,000 pounds of provisions, arms, &c., and found room also for himself, seven Europeans, and two Indians. "Under a serene sky, with a keen but healthy air, the barque glided through some beautiful scenery. On the west side of the river, the ground rose in a gently ascending lawn, broken at intervals by abrupt precipices, and extending in a rich woodland perspective, as far as the eye could reach. This magnificent amphitheatre presented groves of poplar in every direction, whose openings were enlivened with herds of elks and buffalos; the former choosing the steeps and uplands, the latter preferring the plains."* This river is broken by rapids and coscades, and they were compellod to make many laborious portages. The course of their journey led them through many populous beaver settlements. "In some places these animals had cut down several acres of large poplars; and they saw multitudes busy from sunrise to sunset, erecting houses, procuring food, superintending their dikes, and going diligently through all the labors of their little commonwealth." On the 10th June they met with some Indians. "These people were of low stature and meagre frame, round faces, high cheek bones, black hair, hanging in elf locks, and a swarthy yellow complexion; while their garments of beaver, reindeer, and ground-hog skins, dressed with the hair outside, having the tail of the hog hanging down the back, might occasion some doubt whether they belonged to the human race. Their women were extremely ugly, lustier and taller than the men, but much inferior in cleanliness. Their weapons were cedar bows, six feet long, with a short iron spike at one end. The arrows were

*Tytler's Historical View of Discoverics, &c., page 133.

barbed with iron, flint-stone, or bone. Their knives were of iron, worked by themselves. They used snares of green skin, nets and lines of willow bark, hooks of small bones, and kettles of watake, so closely woven as not to leak."*

On the 16th June they reached the banks of the great river flowing westward, which was the object of so much anxious expectation and protracted hope. Embarking anew, it was not long ere the party were alarmed by a loud whoop from the woods, and at the same moment a single canoe shot out from the mouth of a small tributary, and a number of natives, armed with bows and arrows, appeared upon the bank. After a short time, he succeeded in assuaging their fears, and entered into communication with them. Their information was discouraging. They represented the distance to the "Stinking Lake," (as all Indians call the sea,) as immense, and the nations along the river as ferocious, malignant and treacherous. Unappalled by these representations, he again embarked. Shortly after, they concluded to finish their journey overland. For this labor they prepared. "We carried on our backs," says Mackenzie, "four bags and a half of *pemmican*,† weighing from 85 to 95 pounds each, a case with the instruments, a parcel of goods for presents, weighing ninety pounds, and a parcel containing ammunition, of the same weight; each of the Canadians had a burthen of about ninety pounds, with a gun and ammunition, while the Indians had about forty-five pounds of pemmican, besides their guns. My own load, and that of Mr. McKay, consisted of twenty-two pounds of pemmican, some rice, sugar, &c., amounting to about seventy pounds, besides arms and ammunition. The tube of my telescope was also thrown across my shoulders, and we determined to limit ourselves to two meals a day,"‡

Their first day's journey brought them to an Indian encampment, where they saw, to their great encouragement, a spear of white manufacture, which the Indian stated they had purchased of a tribe farther west, near the "Stinking Lake." At night these Indians took a station at a short distance from their place of rest, and "began a song in a sweet plaintive tone, with a modulation exceedingly sweet and pleasing, and solemn, not unlike that of church music." They again pursued their journey, sometimes coasting along the borders of beautiful lakes—sometimes ascending high eminences, from which they could discern, in the distance, a long range of high mountains, which the natives by whom they were traveling, represented as terminating in the sea. In this part of their journey they beheld the richest scenery. Beautiful valleys watered by gentle rivulets, and adorned with umbrageous trees, were succeeded by ranges of hills capped

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* Tytler's History.

† This is buffalo meat dried and pounded, to which is sometimes added marrow-grease and fruit. It has been used time out of mind by the voyageurs, and it has always been purchased by travelers and men of science, for their support in their journeys. It is an Indian dish, no doubt, and this is the name given to it by the Chippewyans and Crees. The French call it taureaux, and the Siouxs pantigion. All the Indians in the buffalo regions make it always, adding cherries or other fruits, together with marrow-grease.

‡ Mackenzie's Travels, page 285.

with snow, whilst far back in the perspective rose a stupendous line of peaks, whose summits were crowned with the same spotless coronet, and partly lost in the masses of heavy and rolling clouds. The effect of sunrise or sunset must have been strikingly beautiful. How rich the contrast of brilliant light and dark shadows, of leaping cascades and quiet lakes, of cold icy peaks and deep green valleys!

After some days they at last came upon an Indian village. This was a village situated only about forty-five miles from the coast, and the inhabitants essentially differed from those east of the mountains in manners, habits, buildings, &c. The houses were constructed of wood. At a little distance, Mackenzie noticed some singular wooden buildings, which he imagined to be temples. They were oblong squares, about twenty feet high, and eight broad, formed of thick cedar planks, beautifully joined. Upon these were painted hieroglyphics and animals, executed with extraordinary accuracy. In the midst of the village was another strange building. The ground plot of it was fifty feet by forty-five. At each end were four posts fixed perpendicularly in the earth. These posts were unornamented, but they supported a beam of the whole length, with three intermediate props. Two centre posts at each end were carved into colossal human figures, supporting on their heads ridge poles. The hands were placed on the knees. Opposite to them were figures with their hands resting upon their hips. All these figures were painted red and black, and the sculpture manifested no little skill and accuracy in the execution. In the mechanical arts, also, they had progressed considerably. The canoe of the chief was of cedar, forty-five feet long, four wide, and three and a half deep. It was painted black, and decorated with white figures of fish. The gunwale, fore and aft, was inlaid with the teeth of the sea otter.

On the 20th of July, they beheld, for the first time, the broad expanse of the Pacific Ocean. The object of their journey was now accomplished. On the white surface of a rock which, from a height of several hundred feet, looked over the great ocean, Mackenzie painted with vermillion the following inscription: "Alexander Mackenzie, from Canada, by land, the 22d of July, one thousand seven hundred and ninety-three." Time has probably obliterated this inscription; but its assaults are made in vain upon the fame acquired by this indefatigable and daring discoverer.

This great western river is the one which has received the name of Frazer. On the 24th of August following, Mackenzie reached the fort at the Athabasca Lake.

Whilst Mackenzie was pursuing his journey to the Pacific, Mr. Fidler, a clerk of the Northwest Company, stationed at Fort Buckingham, on the Saskatchawan river, made a trip southwestward, to the foot of the Rocky Mountains. He seems to have traveled over the region watered by the head of the Missouri. He was so incompetent to the task confided to him, that the accounts he gave do not correspond with the descriptions of Lewis and Clark, and the world has learned nothing from his journey, save the fact of its having been made.

The expeditions of Pike, and of Lewis and Clark, excited the jeal-

ousy of the British fur traders. Pike had restrained their incursions upon the territory watered by the head of the Mississippi, and had shaken their influence over the Indians there. The movements of Lewis and Clark were vigilantly watched by these traders, and when they discovered their destination, immediate preparations were made to anticipate the Americans in the settlement of the Oregon territory. In furtherance of this project, a party was despatched by the Northwest Company, in 1805, under the command of Mr. Laroque, to establish posts and occupy territories upon the Columbia. This party, however, did not succeed in penetrating beyond the Mandan Village, on the Missouri. In the following year, (1806,) another expedition was entrusted to Mr. Simon Frazer. He started from Fort Chippewyan on the Athabasca Lake, crossed the mountains near the source of Peace river, and founded a trading post on a small lake, now called by his name, situated in the 54th degree of latitude. *This was the first settlement, of any kind, made by British subjects, west of the Rocky Mountains.* It is from him that the river discovered by Mackenzie derives its name. Other posts were subsequently founded in various parts of the country extending south to Fort Hall, and southwest to the mouth of the Columbia river, which, on the extinction of this company, became the property of the Hudson's Bay Company. The latter never founded any posts west of the mountains, previous to that period.

The repeated intrusions of the Northwest Company upon the territories claimed by that of the Hudson's Bay, induced the latter to attempt to imitate the policy of the former, lest it should be outstripped in the race for profit. They accordingly commenced establishing posts in various parts of the interior; and very soon, as might have been anticipated, their differences were aggravated into open hostility. They were all far beyond the authority of law, and an injunction in such a country would have had about as much force, and been treated with as much respect, as a ukase of the Emperor of Russia in the United States. Feeling themselves physically incompetent to self-defence, the Bay Company, for the first time, exercised their right as proprietors, to introduce a colony of civilized men into their territories. In the year 1812, they disposed of a considerable tract of land on the southern shore of Lake Winnipeg, watered by the Red river, one of its tributaries, to Lord Selkirk, a Scottish nobleman, who commenced planting there the germ of a new colony, by granting to individuals and families small tracts of land, (according to the English method,) reserving to himself a certain but moderate annual rent in perpetuity. It so happened that the very spot selected for this colony was the one at which the Northwest Company were in the habit of making all the *pemmican* necessary to supply the voyageurs thence to Athabasca, and over the mountains. The settlement would, of course, drive the buffalo away, and thus produce inconvenience to them. This was the true reason why they determined to trespass upon the lands of the rival company, violate the legal rights of Selkirk, and murder the unoffending men who had moved themselves and families from the home of their ancestors, to seek prosperity and happiness in a wild and unknown land. For several years previously, matters

had progressed to such a point of exacerbation between the two companies, that the Northwesters, with the unscrupulous ferocity which such a life as they led among the Indians inevitably produces, even in men of the best early training and education, had waged a vengeful and unsparing partisan war against the posts of the rival company. Sometimes they contented themselves with driving away their inhabitants; at others they cut off their means of support; again they would lie in ambush, and murder them in their routes; and finally, in the year 1814, they organized a powerful expedition against the Red River Settlement, which, after a war of two years, characterized by circumstances of barbarity and scoundrelism, which rivalled or surpassed that of their Indian allies and friends, the war was terminated by the cruel massacre of Mr. Semple, the governor of the colony, with all his intimate companions, and a total expulsion of all the survivors.

This is a brief outline of a course of conduct so lawless, so bloody, so ferocious, and so utterly unprincipled, that we marvel how the imagination of Mr. Irving could so far delude his judgment as to induce him to speak of such men and such atrocities, in language applicable only to deeds of heroism performed for noble ends. It is provoking to have the murders and robberies of a gang of outlaws, whose lives were scarce redeemed by one virtuous trait, and whose acts, if perpetrated within any civilized community under the sun, would have elevated them to the gibbet a thousand times over—celebrated by stooping genius as deeds worthy to be compared to the sublimest age of chivalry, when—if the ends were wrong—they were at least deemed by their pursuers, and the world, the noblest to which heroic valor could devote itself. The fact only shows, (if proof were needed,) that individuals of high genius and brilliant imagination may be totally blinded by the very excess of light; and that it is thus possible to sympathise deeply and sincerely with the guilty actors in the most atrocious deeds, and at the same time wholly overlook the suffering and the bloodshed of their innocent and unoffending victims.

This crowning outrage of the Northwest Company rendered it perfectly obvious that this contest between the two companies must result in the entire ruin of one or both of them. Their differences were brought before the British Parliament in June, 1819, and a debate ensued, in the course of which the conduct of the parties was minutely investigated. The Ministry then interposed its mediation and a compromise was at length effected, by which the Northwest Company was merged in that of the Hudson's Bay. At the same time, and in connection with this arrangement, an act "for regulating the fur trade and establishing a criminal and civil jurisdiction in certain parts of North America," was passed, containing every thing requisite to give stability and efficiency to the Bay Company. The contract between the two companies was signed in London in March, 1821.

Under the provisions of the above mentioned act, the King granted to the "Governor, and company of Adventurers, trading to Hudson's Bay, and to a number of persons representing the Northwest Company, the exclusive privilege of trading for twenty-one years, in all

the territories of Great Britain in North America, except such as are now formed into British Provinces." This grant was renewed in 1842, with some new provisions, chiefly respecting the treatment of the Indian tribes.

It is to be observed, that this charter has nothing to do with the immense region comprised in the original charter of 1670. Within that district they are lords of the soil. The heirs of Lord Selkirk having retroceded to them the title to the lands upon Red river, in 1836, they have replanted the colony originally founded by him. In that remote little colony, so many hundreds of miles beyond the remotest bounds of civilization, without good water communication to connect them with it, and consequently, as we should deem, destitute of the ordinary comforts of life, there are at this time about 5,000 persons,* the largest portion of whom are *Bois Brule*, (or half breeds) the remainder of them Scotch or from the Scottish Isles. But in our conjecture as to their destitution, we should be found upon examination, greatly mistaken. They have a Roman Catholic Bishop, a cathedral, and seven or eight other religious ministers. The company sell their land at 12s. 6d. per acre, and the plantations extend for fifty miles along the river. They cultivate wheat, barley, maize, and a variety of garden vegetables. Their farms are well supplied with stock, and they purchase their dry goods and groceries by exchanging the produce of their farms with the company's posts, or, (as we have seen them do,) carrying their products a cart journey of fourteen days to Fort Mandan. And recently, they have united their means, and sent an agent to St. Louis, who there purchases supplies for them—sends them up the Mississippi, by steam, as high as the head of steam navigation, where they are transferred to *pirogues*,* and finally taken across to Red river in carts. We are afraid that the worthy bishop inflicts slight penance upon them, for the half breeds are said to be the fiercest warriors of the plains; and so late as the summer of 1845, a company of dragoons, commanded by Capt. Sumner, were sent to check their inroads upon the hunting grounds of the Sioux, and we believe they are still troublesome near the border.

Mr. Irving has dilated upon the feudal state of Fort William—its splendid hospitality—the lordly grandeur of its defences—the gorgeous display of its wealth and magnificence—its bountiful banquets, at which the wines of southern Europe gave zest to the game of the forest—and many "an auld world ditty" was sung to stimulate the boisterous mirth of its guests and inmates. But he has forgotten to add to this poetical enumeration of its faded glories, that at this same Fort William, situated near the head of Lake Superior, such a congregation of ruffians, bandits, and scoundrels was assembled as the world has not seen since the days when rape, robbery, and murder were the chief occupations of the inhabitants of feudal castles, and their bastions and parapets bristled with the swords and spears of all who were most base and brutal among mankind; that the tongues which chaunted with so much feeling the glorious songs of "bra' Robin Burns," were daily employed in instructing the ferocious and sanguinary sav-

* Simpson's Travels, chapter 8.

age how to murder and mutilate their fellow-beings—subjects of the same king—for no offence under Heaven but that of defending rights legally acquired and honestly exercised; that every drop of wine swallowed in these festivities was purchased at the cost of as much Christian blood shed by them in defiance of all law, human and divine; and that every dish upon the bounteous board cost the life of an Indian, deluded, debauched, stimulated, and finally sacrificed by them for the furtherance of objects the most mean and selfish, and the gratification of a malignity which could have had its birth-place no where but in the councils of a band of fiends and outlaws.

Mr. Ross Cox, who was a clerk employed by the Northwest Company, has given some accounts of these transactions, but as his narrative bears upon its face the marks of falsehood, as well as those denoting a total want of all proper feeling and all sound principle, we shall here add one or two anecdotes derived from, not a party concerned, but an innocent settler in Selkirk's Settlement, whom we met with at Fort Mandan, touching these atrocities.

Soon after the purchase by Lord Selkirk of the tract of land upon Red river, he discovered that his objects, laudable and legal as they were, were likely to be frustrated by the Northwest Company; and for this reason he purchased two hundred shares and became one of the proprietors in the Hudson's Bay Company, that by thus uniting their interests, his infant colony might have the protection of this ancient and powerful corporation. It was principally because of this connection that the direct war upon it was marked by auch unprincipled and atrocious conduct.

It is not true, as Cox states, that when the final struggle occurred at Red river, it was brought about by fourteen of the *Bois Brule* (or half breeds) who accompanied a party of carts and horses with provisions &c., in violation of the orders of M'Donnell, stationed at Q'Appelle river; nor is it true that the first order to fire was given by Mr. Semple, the governor of the colony. The facts are precisely the reverse of all this. It was an expedition gotten up by the partners of the Northwest Company, consisting principally of half-breeds, who are fully as much, or more ferocious than the natives, for the express purpose of crushing this settlement; and the force greatly outnumbered those employed in the defence. They did enter the settlement in violation of law—they did atack the settlers with a brutal fury known only to such beings—and they did crush the colony—murdering all its chief men, some of the women, and a number of children; burning their houses and devastating their fields, and levying by way of *black mail*, upon all its live stock.

A Mr. Clark, who had originally belonged to the Northwest Company, but who was tempted by better pay, as all of them might have been, to desert those who had some claims upon his gratitude, was placed in charge of the post at Athabasca. Here he was regularly besieged by his old friends. After living some time upon *pemmican* and horse flesh, he was reduced first to *wild rice*,* of which he had

* Wild rice is found in the greatest quantities on Wild Rice river, a small tributary of the Red river, in the territory of Iowa, but it is scattered along all the streams near the 49th parallel. It is in much esteem with the Sioux and other Indians.

carried a small quantity with him. At last, his rice gave out, and he was reduced to *tripe de rocher*.* Finally, even this resource failed, and after inhumanly suffering many of his men to die of absolute starvation, he was compelled to surrender the post with all its furs and other property. Such proceedings as these forced their opponents to like conduct in self-defence, and for several years the different bands of Indians were hired to perpetrate indiscriminate slaughter.

Thirty or forty miles northwest of Fort William, is situated the great fall of the *Portage de la Montagne*. This tremendous cataract surpasses every other in the world, save only that at Niagara. The river for a few miles above moves with a slow and calm current. When its waters arrive at this immense terrace of rock, which is fully two hundred feet in width, they are precipitated in one broad, unbroken sheet a distance of one hundred and sixty feet. For many miles the hoarse roaring of the falling waters may be heard like the heavy roll of distant thunder; and when an unclouded sun pours its beams upon the scene, prismatic rainbows flash in innumerable curves over and around them.

In the year 1815, a party consisting of some twenty men, with six canoes, in the employment of the Bay Company, were descending through that long chain of small lakes and straits which so nearly unite the waters of the Atlantic to those of the Arctic Seas. When they had arrived at the usual place of landing, for the purpose of making the portage around this great fall, they turned the bows of their boats landward, singing the while one of those beautiful and affecting songs with which these hardy and adventurous *voyageurs* were wont to beguile the time, and relieve the fatigue of their laborious way. But they found themselves suddenly set upon by a band of half breeds, under the command of white men, who had lain in ambush on both sides of the river, immediately above the falls. The struggle was fierce, bloody, and unsparing, for the canoe men were fighting for a foothold, to save them from being precipitated over the falls, and their opponents were ruthlessly determined that no living being should plant his foot upon the soil. Two of the canoes succeeded in reaching the shore, and their inmates sprung to the land, with knife and pistol in hand; but one minute sufficed for their destruction. The other four canoes were kept out by the firing and the poles of the half breeds, until the curving current struck them; and then all parties were well aware that further struggle was vain. The half breeds ran yelling with delight to the very edge of the cataract, to witness the result. The canoe men sullenly folded their arms and seated themselves in silence to await their fate. Ah! who shall say what millions of thoughts rushed through their minds in those few fearful moments? The history of their whole lives was, no doubt, spread out in one broad picture, and they commended themselves to the protecting care of their patron saints, and of the Virgin. The

* *Tripe de Rocher* is a species of *lichen* (or moss) much used by the Indians and voyageurs. It is prepared by boiling, is not very palatable, but a good resource when threatened with starvation. Of the lichens used as food there are four varieties, viz: *Gyrophora Proboscidea*, *Gyr. Hyperborea*, and *Gyr. Mechlenbergie*. All of them are used as food, but the Indians reject all but the last.

canoes leaped forward, whirled over and around in their descent, scattering the *voyageurs* in every direction; and in another instant the majestic waters resumed their aspect of stern and solemn grandeur.

ART VI.—EDUCATION—NO. V.

BY JOS. ORMROD, ESQ.

INTELLECTUAL DISCIPLINE OF SCHOOLS—*continued.*

Miss Edgeworth, a lady who has done more for the cause of education, by her various publications, in disseminating correct views on the subject, than perhaps any other writer, concludes some observations on intellectual training, as follows:

"We do not mean to promise, that a boy judiciously educated, shall appear, at ten years old, a prodigy of learning; far from it: we should not even estimate his capacity, or the chain of his future progress, by the quantity of knowledge stored in his memory, by the number of Latin lines he has got by rote, by his expertness in repeating the rules of his grammar, by his pointing out a number of places readily in a map, or even by his knowing the latitude and longitude of all the capital cities in Europe; these are all useful articles of knowledge; but they are not the test of a good education.

"We should rather, if we were to examine a boy of ten years old, for the credit of his parents, produce proofs of his being able to reason accurately, of his quickness in invention, of his habits of industry and application, of his having learned to generalize his ideas, and to apply his observations and his principles: if we found that he had learned all or any of these things, we should be in little pain about grammar or geography, or even Latin; we should be tolerably certain that he would not long remain deficient in any of these; we should know that he would overtake and surpass a competitor who had only been technically taught, as certainly as the giant would overtake the panting dwarf, who might have many miles the start of him in the race.

"We do not mean to say that a boy should not be taught the principles of grammar, and some knowledge of geography, at the same time that his understanding is cultivated in the most enlarged manner; these objects are not incompatible; and we particularly recommend it to *parents who intend to send their children to school*, early to give them confidence in themselves by securing the rudiments of a literary education; otherwise their pupils, with a real superiority of understanding, may feel depressed, and may, perhaps, be despised,

when they mix at a public school with numbers who will estimate their abilities merely by their proficiency in particular studies."*

My last article was occupied in great part, by observations relating to the intellectual department of reading, or in considering the uses which could be made of the reading lessons of children, as a means of cultivating their understandings. The same talented writer, whose language I have just quoted, has some valuable observations which have a bearing on the same subject, and, although of considerable length, they are so much better than anything of the kind which I could myself supply, that my readers will kave no cause to regret their substitution if I here extract them: —

"When children begin to read, they seem suddenly to aequire a great variety of words; we should carefully examine whether they annex the proper meaning to these which are so rapidly collected. Instead of giving them lessons or tasks to get by rote, we should cautiously watch over every new phrase and every new word which they learn from books. There are but few books so written that young people can comprehend a single sentence in them without much explanation.

"It is tiresome to those who hear them read, to explain every word; it is not only tiresome but difficult; besides, the progress of the pupil seems to be retarded; the grand business of reading, of getting through the book, is impeded; and the tutor, more impatient than his pupil, says, 'Read on; I cannot stop to explain that to you now. You will understand the meaning of the sentence if you will read to the end of the page. You have not read three lines this half hour; we shall never get on at this rate.'

"A certain dame at a country school, who had never been able to compass the word Nebuchadnezzar, used to desire her pupils to 'call it Nazareth, and let it pass.' If they be obliged to pass over words without comprehending them in books, they will probably do the same in conversation; and the difficulty of teaching such pupils, and of understanding what they say, will be equally increased. Much of the future capacity of children seems to depend upon the manner in which they acquire language.

"If their language be confused, so will be their thoughts, aud they will not be able to reason, to invent, or to write with more precision and accuracy than they speak."

In another part of the same work (Practical Educatien,) are the following judicious remarks: —

"Spelling comes next to reading. New trials for the temper; new perils for the understanding; positive rules and arbitrary exceptions; endless examples and contradictions; till at length, out of all patience with the stupid docility of his pupil, the tutor preceives the absolute necessity of making him get by heart, with all convenient speed, every word in the language.

"The formidable columns in dread succession arise, a host of foes; two columns a day at least, may be conquered. Months and years are devoted to the undertaking; but after going through a whole spell-

*Practical Education.

ing book, perhaps a whole dictionary, till we come triumphantly to spell *Zeugma*, we have forgotten to spell *Abbot*, and we must begin again with *Abasement*. Merely the learning to spell so many unconnected words, without any assistance from reason or analogy, is nothing compared with the difficulty of learning the explanation of them by rote, and the still greater difficulty of understanding the meaning of the explanation.

"When a child has got by rote, 'Midnight, the depth of night;' 'Metaphysics, the science which treats of immaterial beings, and of forms in general abstracted from matter;' has he acquired any distinct ideas, either of midnight or metaphysics?

"If a boy had eaten rice pudding, till he fancied himself tolerably-well acquainted with rice, would he find his knowledge much improved, by learning from his spelling book the words — 'Rice, a foreign esculent grain?' Yet we are surprised to discover, that men have so few accute ideas, and that so many learned disputes originate in a confused or improper use of words. 'All this is very true,' says a candid schoolmaster; we see the evil, but we cannot new model the language, or write a perfect philosophical dictionary; and in the meantime we are bound to teach children to spell, which we do with less reluctance, because, though we allow that it is an arduous task, we have found from experience that it can be accomplished, and that the understanding of many of our pupils survive all the perils to which you think them exposed during the operation.' The understandings may and do survive the operation; but why should they be in unnecessary danger? and why should we early disgust children with literature, by the pain and difficulty of their lessons? We are convinced that the business of learning to spell is made much more laborious to children than it need to be: it may be useful to give them five or six words every day to learn by heart, but more only loads their memory; and we should at first select words of which they know the meaning, and which occur most frequently in reading or conversation.

"The alphabetical list of words in a spelling book contains many which are not in common use, and the pupil forgets these as fast as he learns them. We have found it entertaining to children to ask them to spell any short sentence as it has been accidentally spoken. 'Put this book on that table,' ask a child how he would spell these words, if he were about to write them down, and you introduce into his mind the idea that he must learn to spell before he can make his words and thoughts understood in writing.

"It is a good way to make children write down a few words of their own selection every day, and correct the spelling; and also after they have been reading while the words are yet fresh in their memory, we may ask them to spell some of the words they have just seen. By these means and by repeating at different times in the day, those words which are most frequently wanted, his vocabulary will be pretty well stocked without its having cost him any tears. We should observe that children learn to speak more by the eye than by the ear, and that the more they read and write, the more likely they will be to remember the combination of letters in words which they have con-

tinually before their eyes, or which they feel it necessary to represent to others.

"When young people begin to write they first feel the use of spelling; and it is then that they will learn it with most ease and precision.

"Then the greatest care should be taken to look over their writing, and to make them correct every word in which they have made a mistake, because bad habits of spelling once contracted can scarcely be cured: the understanding has nothing to do with the business, and when the memory is puzzled between the rules of spelling right, and the habits of spelling wrong, it becomes a misfortune to the pupil to write even a common letter."

"The shame which is annexed to bad spelling excites young people's attention as soon as they are able to understand that it is considered a mark of ignorance and ill-breeding. We have often observed, that children listen with anxiety to the remarks that are made upon this subject in their presence, especially when the letters or notes of grown up people are criticised."

I will only add to the above remarks on the subject of spelling, that, as a guide, to the orthography, pronounciation, and derivation of the English language, no book which I have seen is, in my opinion, so well adapted to the purpose, and so unobjectionable in all respects, as "*The Scholar's Companion.*" a work modeled on the plan of Butler's 'Etymological Spelling Book and Expositor.' It is a book well worthy of being introduced into every school, to be used permanently as the only spelling book.

I wish now to direct the attention of my readers to some other considerations intimately connected with the matters on hand. I have heretofore, in the course of my inquiries regarding a correct discipline and training for children and youth, repeatedly insisted upon the propriety and importance of basing our modes of instruction upon a knowledge of the human mind. The great importance which, in my estimation, attaches to that species of knowledge in all that relates to the science of education, makes me desirous of adding some further remarks to what I have already said upon that subject. If, therefore, I should occupy a page or two in the attempt briefly to explain and elucidate the uses and advantages resulting from the study of *mind*, I hope to be charitably dealt with, and that what I say on a subject, generally so much deprecated, may not be considered as being altogether irrelevant.

Ignorance of human nature—the nature of mind — is that which has occasioned the numerous defects to be found in the prevailing systems of instructions, and what still obstructs the progress of education, and obscures the principles we should adopt for our guidance. It is the fertile source of mischief in moral, religious, and legislative enactments.

The study of the human mind has much to recommend it, independent of the considerations which I have so repeatedly urged in its favor. It gives great comprehensiveness of thought, and affords one of the best disciplines which can be had for matured minds.

But, unfortunately, it has become the fashion of the day to ridicule and discredit this study, as something visionary, and of a character so

purely speculative, as to possess no kind of utility. It is frequently denounced as being concerned only with *abstractions*, *subtilities*, and *hair splitting niceties;* but who thus speak or write, regarding the science of mind — be they in high or low station — are most assuredly ignorant of its nature and value.

They have not studied it, or sought in any degree to inform themselves in what it consists. And it would seem that before any one can be entitled to pronounce upon a thing, he must have some acquaintance with that thing. The old scholastic philosophy — which was indeed concerned with subtilities and artificial distinctions of no value — has left a stigma which, in the minds of many, still adheres to the modern science under the name of *metaphysics*. But the philosophy of the present day differs widely from that which was so diligently and exclusively cultivated by our ancestors some centuries ago, the study of the mind is only the study of *man*, and of those principles, many of which are universal and belong to the whole human family. No one will be fonnd who has given due attention to the s ubject, to regret the time and labor so bestowed; while he who has adequately informed his mind in what relates to it, will, on the contrary be apt to say that in nothing which he has given his thoughts to, has he been more amply rewarded for his pains; and, ten to one, he will be a man of enlarged views, of tolerant sentiments, and charitable feelings. "Do what we will," says an ingenious writer, "we mustphilosophise, well or ill, and the minds of the ignorant swarm with insect hypotheses; they forever generalize too soon and too much." It is not desirable then, I must be permitted to ask, that we should philosophise *well*, since '*philosophise we must!*'

True philosophy teaches us the nature of the operations of our own minds, and brings us acquainted with the laws which govern thought. It is the attainment of truth by means of reason. In the diligent prosecution of it, we get lessons which teach us how to regulate our minds, direct our inquiries, and guide our impulses. It is a fitting subject, truly, for ignorance to sneer at!

Mind is the chief instrument with which we operate in all we do or undertake. It is the medium of all the knowledge which can be acquired. It is surely then expedient that we should make ourselves acquainted with the nature and powers of this instrument, that we may know how to use it to the best advantage.

What kind of knowledge is most useful to men in general? Is it not the knowledge of mankind, and the knowledge of self? And how is this knowledge to be obtained but by studying mind, whether by reading books on that subject, or, by reading and criticising men? Books contain the recorded experience and observations of men who have gone before us, and those among the wisest of their kind. Mind, in our conceptions of it, is a *something* positive and absolute; it is subject to certain invariable laws as well as matter. It has a constitution, and thought has a structure. By rightly prosecuting the study, we discover certain principles which are uniform and immutable, and which govern and direct the mind in all circumstances, and in all its operations. Shall we not then, when made acquainted with these laws, this constitution and these principles, be likely to wield

this instrument, the mind with far greater effect in the accomplishment of all our purposes in regard to it, than we otherwise should if left in ignorance of these things which constitute its nature and its powers. What we term laws, whether of mind or matter, are but facts with which we become acquainted.

The doctrine of the *association* of *ideas* serves to explain much of the phenomena of thought.

What are *prejudices* but wrong connexion between ideas? — the most common, while, at the same time, it is the most mischievous source of error. Habit also, has its foundation in the same law of association, and without its aid we could not persue any train of thought; we should scarcely have the power of reasoning or imagining.

It is true that the philosophy of the human mind deals largely in abstractions, which, in themselves are of no value; but relatively, and for the purpose of reasoning and comprehension, they are of unspeakable value and often indispensable.

They are abbreviated modes of expression, without the use of which our progress in knowledge would be slow indeed, and our ideas circumscribed within limits exceedingly confined.

But who is he in the present day, that has any pretensions to cultivation, or any command of language, and does not deal in abstractions? The contemners of mental science, themselves, make as liberal a use of the *reproachful things*, as do its advocates; nay, they resort to them more freely, often, but without an equal understanding of their uses and significance, The metaphysician, (if I may be allowed to use the term,) John Locke, did more for the development of human reason than all the other writers of his day put together, and certainly more than any one who had preceded him. He set the whole of civilized Europe to thinking, and many of her greatest geniuses to writing on the subject.

And his "Essay on the Human Understanding," cumbrous and unattractive as is the style in which it is written, and notwithstanding that some of his doctrines are exploded, may yet be read with profit. It still furnishes a good exercise for the mind favorable to independence of thought.

"The proper study of mankind is Man."

We study mankind by introspection, or by noting the operations of our own minds, and by observing the minds and characters of others in all the variety of circumstances in which man is placed.

Without attending to the operations of our own minds, and scrutinizing our motives of action, we know almost as little what passes there as what passes in other minds.

All will agree that it is of great advantage to us to turn our thonghts inwardly. We cannot prosecute the study of mind without doing this. If, therefore, the study possessed this single recommendation only, it would be sufficient to give it importance.

"It is by retiring within ourselves," remarks Dugal Stewart, "that we can obtain a key to the character of others; and it is only by observing and comparing the characters of others, that we can thoroughly understand our own."

These observations premised, it will, in my opinion, be no unprofitable use of our time, if, before I resume what I have still got to say on the subject of discipline, we take into consideration the state of the infant mind when first ushered into the world and new to existence.

Let us inquire, therefore, how it is first acted upon, and what are the circumstances with which it is ordinarily surrounded. We may thus get some indications of the principles that should govern us, and the course we should pursue in its after developments.

We can state nothing positive in regard to what mind is, in its intimate nature and essence, but we may affirm with reasonable certainty that all the ideas and knowledge we possess, have been acquired by means of what we orignally obtained through the medium of the senses. We know mind only as connected with matter. It has no intercommunication that we are aware of, with mere spiritual existences, and no other communication with the external world but such as it obtains through the organs of sense. Without these organs, we cannot conceive of its being anything, but must regard the infant faculties as mere susceptibilities, to be directed this way or that, for good or for evil, according to the circumstances under which they are excited into activity.

They certainly cannot act unless they have something to act upon. It is true that, according to the doctrine of phrenology — a science in which I have confidence — there is for each mind a peculiar organization; and our own observations confirm us in the knowledge of the fact, that some organizations are more and some less favorable for producing the desired developments and bringing about the wished for results; but on the principles of the same science, they all admit, to some extent, of being regulated and improved, or if not all, the exceptions are rare.

The first sensation experienced by an infant in its embryo state, is that of warmth merely.

The organs, with the mind itself, it is to be presumed, are there, but in a state of utter inactivity — torpid as it were, or by whatever other word we may more appropriately express their condition; for to all intents and purposes for which mind is efficient, they are a nonentity.

When the infant is fully introduced to the external world, it experiences other sensations — first those which come from the sense of touch, cold, and the sensation of pain when the air first rushes into the lungs. Soon the sense of hearing is developed, and sounds affect it; vision in a brief period performs its functions, and colors, with their many tints, present themselves.

But as yet the infant mind is not aware that there is anything from without — anything beyond its own consciousness — all its sensations are referred to self, and as being a part of self.

By slow degrees, and perhaps long after we presume it to have become familiar with external objects, as such, it learns that there are existences independent of its own sensations, and as constituting no part of self.

It meets with resistance while in the act of putting out its hand or its foot, and repeated experience of this at length forces upon its attention the knowledge. After this, it begins to discriminate between

one thing and another, to recognize persons and individualities. This much we may assert, with some degree of assurance, respecting the state and condition of mind in the first stages of existence, but it will not be worth our while, thus minutely, longer to pursue this curious inquiry, and attempt further to trace the progress of mental development at this early period, and during the first buddings of the infant faculties. The means, indeed, are wanting, which can enable us to do so; but were it otherwise, as has been remarked by a distinguished philosopher, and could we precisely ascertain the workings of the infant mind, many difficult problems in the science of mind would get solved.

It must suffice for our purpose to know that the mind of the child in early infancy, is vacant or unoccupied, and therefore, in a state that is unperverted with worldly notions, and untainted with worldly feelings. What it shall become then, depends very much, if not altogether, upon the circumstances under which it is brought into action, and upon the conduct and direction of those who are entrusted with its fate.

But what is the conduct, generally, of parents and others to whose guidance and influence it is submitted? Before remarking upon this question, let us consider the child when its mind begins to open and expand, and when it first begins to use the faculty of speech. It has, at this stage, already acquired a large stock of ideas which have been accumulating in its mind from various sources; but, as I before observed, it has everything to learn; and everything around it is a wonder and a mystery it is unable to solve.

The principle of curiosity within becomes active, and as soon as it obtains a sufficient command of speech to make itself understood, it seeks to gratify it by inquisitiveness. It has, no doubt, before this indulged its musings in silent wonder upon all the objects of sense which have attracted its notice. At length, and after many painful efforts, doubtless, and much difficult labor, it is enabled to articulate and embody its ideas in monosyllabic words after its own simple fashion.

It is eager for information concerning everything which has employed its thoughts, and would learn the causes and origin of all things. It inquires how the trees grow, and how seeds put in the ground produce plants. It is curious about the moon and stars, and would comprehend its own being. In its simplicity it regards its parents as all-knowing and all-wise, and asks of them questions which the profoundest philosopher would be puzzled to answer. The child, indeed, at this period, often manifests a craving for knowledge and a desire for information which might well shame the adult, who unimpressed with the wonders which surround him, takes no account of phenomena of nature, but gazes in stupid apathy at all the grandeur of the Universe.

When the child thus begins to seek for information, it has acquired no inconsiderable amount of materials for thinking; and if its faculties have not previously been in some degree perverted by injudicious treatment, it is yet in possession of all its native simplicity and ingenuousness; it is confiding and unsuspicious. Its mind is, therefore, in

a suitable condition to be operated upon advantageously, and mould to almost any purpose.

But as I before enquired, what is our conduct towards it at this most interesting period, when its mind begins sensibly to act and unfold its capabilities? when it is so ductile and as pliant as tempered clay? Are we sufficiently mindful of its susceptible nature, to guard it against all false impressions and evil influences? Do we seize upon and take advantage of that desire for information—that prying curiosity or inquisitiveness which so remarkably distinguishes it, to lead on its mind to a vigorous and wholesome development of the faculties? or does not the parent, equally with others, more frequently do what he can to repress and extinguish it by his indifference and evasiveness, if not by a treatment still more mischievous? How often is it the case that when a child, seeking for information, asks a question of its parent regarding some matter curious to itself, but distasteful to the latter, instead of receiving attention and a suitable answer, it meets with repulse and ill humor—'I do not know; you ask too many questions,' is perhaps the response; and if the question is repeated or followed by others, the child is probably driven away from him with the harsh words,—'go away, and don't pester me.'

The question is perhaps a simple one, and regarded by the parent as too trifling to merit attention; but he must recollect that it comes from a simple being, and one who, if always treated after this manner, will be likely to remain simple, and become trifling as a man. Frequently so treated, the child will cease to ask questions, and cease, perhaps, to indulge its inward musings on what seemed curious to its feeble conceptions; and we would not wonder if it should lose its sprightliness, and become more remarkable for stupidity than inquisitiveness. A child will ask many questions regarding what it cannot be made to comprehend, and then it will be the duty of the parent so to inform it, and say, 'I will tell you that when you get older and can understand it.' Any attempt to explain a thing which is above the understanding of the child should be carefully avoided, as tending to confuse its thoughts, and do an injury to its mind. There should be no attempts made to explain to a child of early years, words which convey abstract ideas; yet, on such occasions, when evasion becomes necessary, discouragement should be guarded against.

But there is another mode of treatment, or manner of receiving the enquiries of the child, not less commonly practised, and which is, perhaps, more heartfelt to its growing faculties than the one I have just been remarking upon; this is the reprehensible practice of giving a child witty instead of correct answers, cajoling and bantering it for amusement, and placing before its mind false and ludicrous images. This mode of treating the child is indulged in through a habit of thoughtlessness, or a want of reflection upon the consequences of a course which, to say the least of it, is certainly both inconsiderate and indelicate. Parents or others who commit this error, are little aware of the injury—often irreparable—which they thereby inflict upon the minds and morals of children. The child, when thus treated, soon becomes ashamed of its inquisitiveness, and gets its thoughts diverted from every thing which can strengthen or improve its faculties; it

loses its self respect—if in possession of any—and all respect for others, and soon becomes froward and ungovernable.

There is much reverence due to children. We should encourage and endeavor to satisfy their eager inquiries, and above all, carefully avoid giving them false information, ridiculing their imperfect conceptions, or deceiving them in any manner.

If a parent would always take a real interest in forming the mind of his child, carefully watch and assist its developments, and endeavor with a true sympathy, to satisfy its cravings for such knowledge as it is seeking, the child would come to regard him as an oracle of wisdom, and his influence over it would be almost boundless; he might, with correct views and a competent judgment, direct its faculties as he pleased.

But this presumes that there would be no interference with his plans, that others would act towards the child in the same way, and in conformity with his system and his wishes—that, in short, all the circumstances in which the child is placed are entirely favorable. Unfortunately this can hardly ever happen.

Circumstances are most frequently hostile or unpropitious, and the efforts of the parents, when rightly directed, are too often counteracted by the injudicious course pursued by others around him, and whom he cannot impress with the same views and cannot control.

Yet a careful and intelligent parent may accomplish much even in the worst circumstances.

[Intellectual Discipline to be continued.]

ART. VII.—GEOLOGICAL SURVEY OF MISSOURI.

From the beginning of our labors as journalists, we have continually kept in view the development of the mineral resources of Missouri, and have sought information upon this subject in every quarter where we had reason to suppose that it could be obtained. We had two objects in view: first, to give publication to such facts as had been discovered from time to time by our citizens; and second, to bring the question of a geological survey before the legislature of the State.

During the course of last year, our pages were enriched by a number of able articles on this subject, from the pens of both scientific and practical individuals; and we began to look with confidence to the legislature for a liberal appropriation to defray the expenses of a geological survey. The Legislature convened—and we were happy to find an able coadjutor in the Historical and Philosophical Society of the State, who, through their organ, S. T. Glover, Esq., presented a memorial upon the subject, so replete with argument and statesman-like views, that we felt assured, for a time, that our labors would be

crowned with success. The junior editor of this journal, being a member of the Legislature, was honored by the Historical and Philosophical Society, with the presentation of the memorial, and was also appointed chairman of a select committee on a geological survey of the State. This committee, taking into consideration the large quantity of lands owned by the general government in the mineral districts of Missouri, considered it but just that Congress should lend its aid, and bear a portion of the expense of making known the value of the public domain. As the first step, therefore, towards carrying out this important object, the committee agreed upon the following memorial:

Memorial to the Congress of the United States, on the subject of a Geological Survey.

Sec. 1. Your memorialist, the General Assembly of the State of Missouri, would respectfully represent, that said State is possessed of vast agricultural, mineral, and commercial resources, in the development of which, her own citizens, and those of the United States, are deeply interested.

Sec. 2. No species of valuable mineral is found in any portion of the Union, that does not abound in Missouri, with the exception, probably, of gold and silver. Ores of iron, lead, tin, copper, zinc, mercury, cobalt, antimony, and nickel, mineral coal, and porcelain and other clays, fit for the manufacture of every class of stone ware, have been discovered in pure quality, and several of them in greater quantity than in any other part of America; while the fertility of her soil is not inferior to the best known.

Sec. 3. Notwithstanding the mines of Missouri, save in the single instance of lead, have never added any considerable amount to the common wealth of the State, or the Union. Several causes have retarded the development of her resources, to which your memorialist would respectfully invite the attention of Congress.

Sec. 4. The richness, extent, and importance of these resources have never been fully made known to the world; the mineral regions lie, generally, off from the navigable water courses, and far removed from any present medium of transportation; the State, owing to the pecuniary demands to which she has been subjected on other accounts, has never possessed the ability to remove these obstacles by appropriations of the requisite amount of money for the purpose.

Sec. 5. Your memorialist is of opinion, that at this time nothing would prove so valuable a means in opening the way to the full development of the vast natural resources of Missouri, as a thorough geological survey, and examination of her mines, soils, earths, rocks, water courses, and general surface. A memorial to this General Assembly, from the members of the Historical and Philosophical Society of Missouri, containing many valuable suggestions upon the subject, is herewith communicated. The General Assembly of Missouri, impressed with the importance of the considerations therein mentioned, and others presented to their minds, would, without further delay, proceed to execute a thorough geological survey of the State, but for the want of means to accomplish it.

Sec. 6. They, therefore, respectfully solicit of the Congress of the United States, the grant of one township of land in each of the United States land districts within this State, to be applied, in conjunction with such appropriations as the State of Missouri may provide for the same object, to the expense of accomplishing such survey; and your memorialist would respectfully pray, that the geologists appointed by the State of Missouri, to carry out the object of the grant, be authorized to select the lands while executing the work; and the said General Assembly do agree, in the event of Congress making the grant as proposed, carefully to husband the fund, and after defraying the expenses of the contemplated survey, to apply the residue to the establishment and endowment of a school of

Agriculture, Mining, Metallurgy, Chemistry, &c., which shall never be abolished by the State, nor suffered to fall.

SEC. 7. The donation of lands now desired, would be of incalculable benefit to Missouri, without imposing any burden upon the general government, which would be felt by her. Indeed, your memorialist confidently believe, that such a donation applied to such a purpose would give to the general government, in the enhanced value and readier sale of her lands, the increased population, and enlarged commerce from which her revenues are drawn, the greater facilities which would be afforded to the military and naval interests of the waters of the west, and the additions which might be expected to accrue to the general intelligence, resources, power and wealth of the Union, far greater advantages than could possibly be realized from retaining the trifling amount which is desired.

SEC. 8. Your memorialist would beg leave to refer to the fact, that Congress has frequently recognized the force of these suggestions, as touching the promotion of her own interests, and with that view has been induced to expend, at different times, large sums of money for geoligical surveys in the States of Illinois, Iowa, Wisconsin, and Michigan, which have done so much to stimulate, expand and develop the agricultural and commercial interests of the people residing therein. It is now executing a thorough survey of the Minesota territory. The people of Missouri have seen and felt the injury they have sustained by the superior attractions which have been added to their neighbors in this particular, by the munificence of Congress, and regretted that nothing of this character had been undertaken in Missouri, as well on account of their, as the interest of the general government.

SEC. 9. On a kindred subject a most enlightened policy has hitherto characterized the action of Congress; without referring to numerous instances, we beg leave to allude to the Atlantic and Lake Surveys —the examination of some of the rivers and harbors on the Pacific coast — the exploring expedition — the exploration of the route across the Rocky mountains, and an examination of the geographical features of the country on, and connected with, that route. Sustained by the strong hand of your honorable body, these surveys and explorations have been made, and have resulted not only in the development of our resources as a nation — fostering agriculture, commerce, and the mechanic arts, but have placed our government on the most elevated ground. Your memorialist believe that the hidden mineral wealth — the dormant agricultural power, and the capabilities of navigation, so remarkable in Missouri. would be fully developed by the execution of the survey now sought, and the valuable lands owned by the general government in this State would be rapidly selected — affording a home of plenty, comfort, and health to that best of all population — the tiller of the soil.

SEC. 10. It seems to your memorialist that after what has been done so bountifully for others, without solicitation as far as they are advised, the General Assembly of Missouri may have reason to expect as matter of right, from the Congress of the United States, the appropriation now most respectfully desired.

T. F. RISK,
Chairman of the Select Committee on Geological Survey.

This memorial was adopted by both branches of the Legislature and received the sanction of the Executive. Following up the plan shadowed forth in the memorial, a bill was introduced in the House of Representatives, which, among other things, provided for the appropriation of $10,000 towards paying the expenses of a geological survey, upon the condition, however, that Congress should make the donation asked for in the memorial.

This bill passed the House without a dissenting voice, and was sent to the Senate, where, owing to the stupidity or some strange whim of that angust and sapient body, it was laid on the table and there permitted to slumber until the close of the session.

Had this bill contemplated the commencement of a geological survey, involving the expenditure of perhaps $60,000, to be raised by the State in case Congress should not see proper to lend its aid, a wise precaution might have induced the Senate to pause and consider of the means of carrying out the measure; but when the State was in no wise committed unless Congress made the grant of land prayed for, we cannot conjecture the ground of the Senate's objection, unless it arose from an apprehension that if the mineral wealth of the State should be explored, and the facts made accessible to all the world, it would induce capital and enterprise to come here from other countries. Indeed such a conjecture is quite consistent with the spirit of Missouri legislation; for who can point to the law in our statute book that offers the slightest encouragement to emigration, or the transfer of capital from other States to this?

We have given a history of the legislative proceedings respecting this important measure that its friends may know where to lay the blame of its failure; for ourselves, we have labored arduously in its behalf from the commencement of the Western Journal to the passage of the bill through the House of Representatives. Nearly two years must now elapse ere the subject can again be brought before the Legislature of the State. In the meantime, our Senators and Representatives in Congress are charged with the duty of soliciting—nay, begging a donation of land to enable Missouri to make a geological survey, when she, herself, has refused to appropriate a single dollar for the purpose. In such circumstances, the member from Missouri who can rise in his place, and ask Congress to make the donation prayed for, without a blush, may rejoice in the possession of more brass than has, perhaps, ever fallen to the lot of any other member of that honorable body.

Had the bill passed into a law, it would have afforded evidence that we were in earnest, and that we really desired to enter upon the survey; but with what reason can we expect Congress to take the initiatory step, and place means at our disposal, when we have refused to declare, by a solemn act, that we will take upon ourselves the responsibility of making a proper application of their bounty? But should Congress make the grant, still the State can take no step in the matter, until the meeting of the next Legislature. The indefinite postponement of an object of so much importance, is to be much regretted by every friend of the true interest of the State; more especially at a time when we have a right to expect that an extensive demand will shortly spring up for our iron and coal. The construction of a railway from Cincinnati to St. Louis, may now be regarded as certain. Cincinnati has voted in favor of subscribing $1,000,000 to the work; St. Louis has voted in favor of subscribing $500,000, and the counties through which the road will pass, have voted nearly a million more; individual enterprise will make up the balance that may be required. But who doubts of the commencement of the great Pacific Railway within the next two years? The iron required to construct this road, if of the heaviest description of rail, will cost about $20,000,000. Missouri has metal sufficient to construct all these works, and perhaps a hundred others of equal magnitude; but owing

to the absurd policy of her statesmen, she is not likely to reap any of the advantages to be derived from furnishing the necessary material. We verily believe that the mines of Missouri are of infinitely more value, than all the gold of California; but while $6,000,000, 300 vessels, and 20,000 individuals have gone from the Atlantic ports within a few months in search of gold in California, we have not heard of the investment of a single dollar in the mines of Missouri.

How long the mineral wealth of Missouri is destined to remain unproductive, we are unable to predict; but although the Legislature has refused to aid in bringing it to the knowledge of the public, we are still resolved to collect and publish such facts in relation to it, as we can conveniently procure, for the benefit of our readers.

ART. VIII.—COMMERCIAL STATISTICS.

Comparative receipts of sixteen of the leading articles of Produce into the port of St. Louis, during the first four months of the years 1848 *and* 1849.

		1848.	1849.
Tobacco,	hhds.	899	540
	boxes,	2225	1505
Hemp,	bales,	7032	11567
Lead,	pigs,	137657	122891
Flour,	bbls.	102059	67467
Wheat,	bushels,	532973	374324
Corn,	bushels,	103004	90824
Oats,	bushels,	85098	46590
Barley,	bushels,	33824	21301
Rye,	bushels,	1898	2188
Beans,	bbls.	1605	760
	sacks,	1155	821
Beef,	tcs.	3403	1489
	bbls.	2118	2336
Pork,	bbls.	67725	81942
	tcs.	789	1038
	boxes,	100	1484
Lard,	tcs.	2778	8520
	bbls.	63109	50064
	kegs,	7703	8966
Bacon,	casks,	11938	14273
	hhds.	2468	1685
	bbls.	1454	1507
	boxes,	2733	1509
Butter,	bbls.	261	883
	kegs,	379	979
	jars,	16	214
Whisky,	bbls.	8949	11389

The foregoing table shows a falling off in some articles. We subjoin the following remarks from the Missouri Republican, from which the above table is taken :—"It must not be overlooked, however, that the California emigration has also given a new direction to more than one branch of the provision trade, and a very large amount of bacon, corn, oats, hay, &c., which would have, as heretofore, found this market, has been taken to St. Joseph, Weston, and other points on the Missouri, to supply the wants of the thousand of adventurers who are now about to commence their march across the Plains. From this to the close of the present month, should the weather hold good, but a limited stock of produce may be anticipated; but after that period, and perhaps to the close of the season, the arrivals will, doubtless, increase, and should navigation continue unobstructed, we may confidently anticipate a very busy season."

[From the Missouri Republican.]

PORK PACKING IN THE WEST—NUMBER OF HOGS SLAUGHTERED IN THE PAST SEASON, &c.

It has been very difficult to arrive at the correct estimate of the number of hogs slaughtered in this part of the west; but with our own enquiries on the subject, aided by the kind assistance of some of our friends among the dealers in provisions, we are enabled to lay before our readers a statement which we rely on as mainly correct.

The Cincinnati Chronicle, at the close of the packing season, estimated the number of hogs killed on the Ohio and tributaries, at about equal to last year's report, though less at many of the prominent points. Say—

Ohio, Kentucky, Indiana, and Wabash	1,000,000
Illinois, Missouri, and Mississippi	581,000

making in the whole, 1,581,000, being 81,000 over last year's yield in the west.

Under this aspect of the subject, it is difficult to predict for the future, but as the stock is larger than it was last year, and the exports for the first quarter of the year to 1st of April, were about the same, it is most likely that no higher rates will prevail for the balance of the season than last year; and without a further export demand, it looks as if the market might be depressed and lower prices would prevail.

The amount of exports to the Pacific will not equal the extra demand for the army last year, and hence, it is fair to infer, that we shall not occupy as favorable ground for good prices, and would caution our friends against large expectations.

The markets abroad are generally dull, and if the stock of meats on hand at this date, should remain in this country, there is no probable chance of any advance.

In regard to the article of lard, it does not appear that the stock is excessive. A large amount of meat was put up in long middles, and the price in the packing season was too low to induce renderers to use the side, and as a large amount is held by operators, who can af-

ford to lay out of their investment, it may be regarded as a safe article, and more likely to pay than brine meats.

The chief demand at this point, for California, has been for side bacon, and the stock here has been reduced, so that it may be relied on as likely to do well. The same may be said of shoulders, of which the stock is not equal to the average of last year, and the price may keep up to rates that will pay.

Below will be found a table compiled from the most authentic information, and which is believed to be in the main correct:

Hogs Slaughtered.

MISSISSIPPI.		St. Joseph, - -	11,000
Davenport, - -	2,500	Lexington, - -	12,000
Farmington, - -	6,500	Weston, - - -	10,000
Madison, - -	6,000		
Keokuk, - -	34,000		72,200
Burlington, - -	20,000	ILLINOIS.	
Bloomington, - -	15,000	Chilicothe, - -	3,500
Hannibal, - -	25,000	Beardstown, - -	46,500
Rockport, - -	3,500	Canton, - - -	18,000
Lagrange and Tully, -	7,000	Tremont, - - -	1,000
Churchville, - -	5,000	Bernadotte, - -	700
Louisiana, - -	6,000	Peru, - - -	4,000
Warsaw, - - -	15,000	Winchester, - -	2,500
Oquawka, - -	7,000	Florence, - - -	3,100
Alton, - - -	35,000	Naples, - - -	3,500
St. Louis, - -	90,000	Quincy, - - -	22,500
		Pekin, - - -	30,000
	277,560	Griggsville, - -	7,000
MISSOURI.		Meredosia, - -	6,000
Kansas, - - -	2,300	Peoria, - - -	30,000
Linnville, - -	800	Lacon, - - -	10,000
Arrow Rock, - -	1,000	Havana, - - -	5,000
Camden, - - -	6,500	Rushville, - -	5,000
Providence, - -	2,300	Lagrange, - - -	4,000
Liberty, - - -	1,700	Knoxville, - -	15,000
Glasgow, - - -	1,800	Springfield, - -	1,000
Brunswick, - -	5,550		
On Grand River, -	1,750		219,000
Rocheport, - -	2,500		
Alexandria, - -	13,000	Total, - -	568,760

COMMERCE OF GALENA.

We regret that we are not able to give a more complete and general account of the commerce of this important and interesting city. A friend at that place has promised to give us a history of its growth, commerce, &c., which we hope to be able to publish before long. In

the meanwhile, we publish the following report from the wharf master to the mayor and aldermen: —

To the Mayor and Aldermen of the City of Galena:

Gentlemen, — In compliance with your resolution of the 7th inst., I herewith submit a statement of the number of steamboat arrivals, tonnage and wharfage, number of keel and flatboats, quantity of lumber, shingles, laths, square timber, wood and miscellaneous articles, subject to wharf charges, within the city the past season. I have also endeavored to ascertain the quantity of lumber, &c., that has been delivered by steamboats or otherwise, and not subject to wharfage.

I have been furnished by our merchants with the number of pigs of lead, barrels of flour, bushels of grain, pounds of copper, and number of hides that have been sent forward to the southern and eastern markets during the above period; all of which I have embodied in my report. Its publication as a matter of reference, will be gratifying to many of our citizens, and may be the means of directing the attention of others to our trade and commerce — that will have a beneficial influence.

From March 17th to December 6th, arrived —

	Tonnage.	*Charges.*
259 steamboats, - - -	36,065	$1,742 50
158 keelboats, - - -	9,480	158 00
107 flatboats, - - - -		46 75
5,246,798 feet of lumber, - - -		393 98
2,537,392 shingles, - - - -		76 87
672,000 laths, - - - -		29 37
26,596 feet of timber, - - -		19 75
12,316 pieces of cooper stuff, &c.		3 67
2,088 cords of wood, - - -		129 97
		$2,600 86

For which amount see receipts and reports on file.

Nine steamboats were admitted free by order of the City Council.

Arrived by steamboat or otherwise, free of charge —

620,000 laths, | 406,500 shingles,
365,000 feet of lumber, | 5,900 cords of wood.

5,611,818 feet lumber, - - -	value, $72,953 63
3,005,118 shingles, - - -	9,015 35
1,292,600 laths, - - - -	2,908 35
26,576 feet timber, - - -	1,218 80
7,988 cords wood, - - -	19,670 00
Cedar posts, staves, &c., - -	897 54
Total value of imports of lumber, shingles, ect.	$106,663 67

From March 17th to December 6th, was shipped —

681,969 pigs of lead, 47,737,830 lbs.	value, $1,527,610 56
16,985 bushels of wheat, - -	9,341 75

3,467 bushels barley, - - - - -	$ 1,040 10
13,491 barrels of flour, - - - - -	43,845 00
7,128 hides, - - - - - -	14,251 00
45,823 pounds of copper, - - - -	5,951 99
Total value of exports, - - - -	$1,602,050 40

JOHN J. CRUIKSHANK, *Wharf Master.*

GALENA, December 16, 1848.

COMMERCE OF CINCINNATI.

THERE is perhaps no city in this or any other country whose growth in population, commerce and manufactures, has been more rapid and imposing than that of Cincinnati; and upon this account a correct knowledge of the elements of her prosperity, and the facts connected with her commerce and manufactures, are of more than ordinary interest to the merchant, the manufacturer, the farmer, and political economist, and hence we have desired to procure well digested tables of her commerce and manufactures through a series of years; but we have not yet met with such, The following tables which we have taken from "*Cist's Weekly Advertiser*," are not without their value, but it is obvious that they are made up more for the purpose of *puffing* the "Queen City," than to enlighten the country in regard to the true condition of western commerce. That the commerce of Cincinnati is growing most rapidly, no one doubts; but who can form a just idea of its advancement from the following tables? Here we have the business of about seven months posted up against that of the preceding twelve months, and computed by tons, barrels, packages and pounds. The figures show a total for the seven months larger than that of the twelve. Had these tables compared the business of these seven months with the corresponding seven months of the preceding year, and instead of transcribing certain items, have given a complete list, we could then have formed a just opinion in regard to the increase of business. We observe that the imports of corn, cotton, wheat and some other important articles, have not yet reached the amount received during the preceding year; and one would like to know whether the imports of these articles are likely to fall off or increase. No notice is taken of sugar—the consumption of this article is a good index to the condition of the country; for a scarcety of money invariably lessens the quantity of sugar used by the great mass of the population. We notice that in the article of green hides, the quantity imported in the seven months, ending 9th April, 1849, exceeds that imported in the twelve preceding months by 232,147

pounds, and these figures are made to swell the total of quantities footed up at the bottom of the table. It would naturally occur to one that a small deficit in the number of hogsheads of sugar, would balance this mighty increase in green hides. But notwithstanding these tables do not exhibit the facts which we have desired to obtain, they may yet be found of value to our readers, and we have therefore transferred them to our pages with the comments of the editor.

The increase of business in Cincinnati, during the last six or seven months, is truly remarkable. As an evidence of the general fact, I transcribe from the Merchants' Exchange books the following items as specimens of the rest, together with the corresponding articles for the *entire year* previous :

IMPORTS.	1849.	1848.
Green Apples, bbls.	20,539	27,747
Butter, "	5,768	4,646
" firkins and kegs,	6,386	5,306
Blooms, tons,	6,307	1,398
Bran and shorts, bush.	13,393	3,721
Corn, "	183,613	260,598
Cider, bbls.	4,364	1,817
Cheese, boxes,	109,580	95,763
Cotton, bales,	6,262	8,334
Coffee, sacks,	49,298	50,570
Flour, bbls.	262,283	96,955
Feathers, sacks,	3,069	3,108
Fruits, dried, bush.	28,654	24,764
Glass, packages,	31,391	58,578
Hides, green, lbs.	242,976	10,829
Hay, bales,	9,565	4,685
Iron and steel, pcs.	125,406	125,920
" " bdls.	21,707	21,906
" " tons,	1,351	724
Leather, bdls.	4,185	4,087
Lemons, bxs.	3,680	1,110
Lime, bbls.	29,789	30,145
Liquors, pipes,	1,705	2,138
" packages,	269,336	242,809
" tons,	4,191	3,162
Molasses, bbls.	42,414	42,750
Malt, bush.	12,247	4,186
Nails, kegs,	34,746	35,796
Oils, bbls.	5,034	3,300
Oranges, boxes and barrels,	5,196	3,109
Oats, bush.	85,770	112,601
Oil Cake, lbs.	1,741,842	1,670,086
Raisins, boxes,	14,243	15,579
Rice, tcs.	1,731	1,450
Grass Seed, bush.	5,483	4,634
Salt, sacks,	42,623	27,304
" bbls.	56,757	57,023
Tea, packages,	5,551	2,228
Tobacco, bales,	930	731
Wines, packages,	5,541	2,482
Wheat, bush.	293,342	315,662
Quantities,	3,778,145	3,369,092

It appears, therefore, that our imports for but little more than seven months, being foom September 1 to April 9, 1849, exceed those of the entire previous twelve months, which had been the heaviest year's imports, up to that date.

Let us now examine the exports of the corresponding period. Of these I shall take our own products, either in provisions or manufactured articles.

	1849.	1848.
Beef, bbls.	11,942	13,413
tcs.	9,265	3,587
Beans, bbls.	1,440	1,087
Brooms, doz.	2,413	2,746
Bagging,	3,997	9,453
Candles, lbs.	27,002	19,808
Cooperages, pkgs.	46,549	27,938
Flour, bbls.	221,493	129,651
Fruit, bush.	4,968	1,678
bbls.	3,583	1,097
Linseed Oil, bbls.	2,020	2,026
Pork and bacon, packages,	210,339	208,336
Rope and Twine, packages,	2,818	3,239
Soap, boxes,	8,492	7,389
Manufactures, pkgs.	73,716	18,513
Starch, boxes,	5,324	5,033
Tallow, bbls.	4,592	5,025
Whisky, bbls.	84,125	117,298
Quantities,	809,686	577,299

The disparity between the exports of the last entire year, and the seven months of the present, in favor of this, it will thus be seen is still greater in our exports than our imports.

RAILROAD TO SAN FRANCISCO.

A few days before the great fire in this city, we received a pamphlet containing the proceedings of a public meeting held in Boston, on the 19th day of April, 1849, convened by the friends of a railroad from St. Louis to San Francisco. Viewing this as an important movement in respect to a subject of general interest to the people of every part of the Union, we transferred to our pages the address sent forth by said meeting to the people of the United States. But that portion of our printed matter containing this address, as well as the pamphlet, having been consumed by fire, we regret that we have been thus deprived of the previlege of publishing it for the benefit of our readers. From one page of the proof sheets, however, that happened to be left in our possession, we are enabled to give the following outlines of the scheme proposed by P. P. F. Degrand, Esq., and adopted by the Boston meeting: —

It was proposed "that a company (*composed of men, in whose integrity and steadiness of purpose, confidence can be reposed by the nation,*) be chartered by Congress, to construct a railroad from St. Louis to San Francisco, with a capitol of $100,000,000, and that this company,

(after having paid in $2,000,000,) shall have the right to borrow United States 6 per cent stock, to such an amount (not exceeding $98,000,000) as may be sufficient to finish the road and carry it into full operation, with a double track." And further, "that Congress shall give the company a strip of public land, ten miles wide on the north side of the road, and the land for the bed of the road, and for depots, and the right to take from the public lands, wood, gravel, stone, iron, and other materials, necessary to construct the same; that immediately after the surveys are made, the company shall proceed to construct the road on the whole route, going to work at once on as many different parts as practicable; and building at different points, temporary roads, to be used while the permanent road is constructing," that "at points of any difficulty, two separate sets of men (relieving each other) be employed, to secure a continuation of the work, *night and day*, and that *at the most difficult points*, three separate parties of men (working each eight hours a day) be employed *to secure continual work, without interruption either by meal times or by night*, employing in all cases, as many men as can work to advantage, and having all sorts of work connected with the enterprise going on at the same time, on the route, and elsewhere, so that there shall be no delay which can be avoided, and that a line of telegraph be established, as far, and as fast as practicable, to transmit intelligence for the purposes of the road, and for the government."

We admire the spirit evinced by the Boston meeting in respect to the energetic prosecution of the work: we have resolved to make a trip to the Pacific on a railway, and we desire to see the work completed in as short a time as practicable, having proper regard however to the economy of its construction. But we wish to travel at as little cost as practicable, and we are apprehensive that if the road be made upon a principle that requires it to pay dividends to the owners, that we, and many others, shall not find it convenient to make a pleasure trip to the gold region. Indeed the merit of the enterprise will consist chiefly in the cheapness of travel and transportation across the continent. Very few articles of commerce would in our opinion be transported on this route, at rates that would pay reasonable dividends to stock-holders.

The author of the address says, "the adoption of this plan will secure the completion of the road, in as brief a space of time, as may be permitted, by its physical obstacles — AND WILL SECURE THIS BY A SINGLE ACT OF CONGRESS, free from the chance of future freaks of legislation. THIS IS THE DISTINGUISHING FEATURE OF MY PLAN,—

and it is free from the objection of absorbing the private resources of active men, and free from the risk of halting in this great work at every step, for the want of tangable means." These are doubtless important considerations; but we see no reason in case the general government should undertake the work. Why Congress may not by ONE ACT OF LEGISLATION provide the means necessary for its completion. Let Congress authorize the issuance of $100,000,000 of stock, or such amount as may be deemed sufficient for the purpose, and by the same act appropriate the proceeds arising from the sales of the public lands to its redemption; put the road under contract, and let the stock be disposed of from time to time as the means may be required, and we are of opinion that there would be little to fear from subsequent freaks of legislation.

It is not our object however at present, to discuss the merits of this, or any other particular scheme, for carrying on this great work. We are much pleased to find that the people of Boston are alive to the enterprise. If the people of the United States can be fully awakened to the importance of the work, we feel no apprehension that they will fail to agree upon a plan of raising the money necessary for its construction.

OHIO AND MISSISSIPPI RAILROAD.

IN February, 1848, the general assembly of the state of Indiana, granted a charter under the above title, for a railway commencing at Cincinnati, (Ohio,) and passing through Vincennes, (Indiana,) to St. Louis. On the 29th day of March, 1849, the directors appointed by the legislature of Indiana, met at Vincennes and organised said company.

ABNER T ELLIS, was elected president, JOHN ROSS, treasurer, and BENJAMIN M. THOMAS, secretary. Active measures were taken by the president and directors, to insure the commencement of the work with the opening of the present season, and but for the failure of the legislature of Illinois, to grant the right of way, the work would in all probability have been commenced by the present time. Professor Mitchel, of Cincinnati, who made a survey of the route, reports the distance from Cincinnati to St. Louis, to be about 360 miles, and estimates the cost of making the road, at about $16,000 per mile.

The cities of Cincinnati and St. Louis, have been authorized by the legislatures of their respective States, to subscribe for stock in said work, and the citizens of each have respectively voted in favor of the subscription for $1,000,000, by Cincinnati, and $500,000 by St. Louis. The Counties near the contemplated route, have also subscribed, as we are informed, nearly $1,000,000, and further subscriptions are expected from other counties. These subscriptions are made by the counties in their corporate capacities acting under legislative authority. Notwithstanding the legislature of Illinois failed to grant the right of way through that State at its last session, yet the friends of the work entertain little doubt but that the next session will favor the work, and hopes are entertained that the executive will convene the legislature at an early day.

In point of importance, we regard this work as one of the first magnitude, (excepting always the Pacific railway,) and are of the opinion, that no line of improvement now contemplated in the United States, will prove more profitable to the stockholders. It is a section of the great central line, from the Atlantic to the Pacific, and uniting the two great central cities of the valley of the Mississippi, it is destined to become one of the greatest thoroughfares of travel on the continent.

PANAMA RAILROAD.

We learn from the N. Y. Courier and Enquirer of the 23d June, that the subscription books for the capital stock of this company, amounting to $1,000,000, were opened on the preceding day, and that the whole amount was taken before three o'clock. The subscriptions were principally by capitalists of the State of New York. The company acts under a charter from the Legislature of New York. Wm. H. Aspinwall, J. S. Hopkins, Henry Chauncey, James Brown, C. W. Lawrence, G. Kemble, Thos. W. Ludlow, D. Thompson, J. B. Varnum, S. S. Howland, D. M. Wetmore, E. Bartlett, and H. Allen, directors. The Courier and Enquirer gives the following synopsis of the charter and survey of said road:

No stockholder is individually liable beyond the payment in full of the amount of stock held by him.

The basis of the Company's operations is a grant or exclusive privilege, from the Republic of New Granada, to Wm. H. Aspinwall, John L. Stephens, and Henry Chauncey, for the construction of a railroad across the Isthmus of Panama.

Among the provisions are the following, viz:

An exclusive right to construct a railroad across the isthmus, with the right to use gratuitously all the public lands lying on the route of the road.

Eight years, if required, for completing it.

Twelve hours for transportation over it.

Transit for merchandise and specie free of duty.

A gift of about three hundred thousand acres of land, to be selected by the grantees from the public lands on the isthmus.

Iron, and all implements and materials for the road, provisions, and other articles, for the persons employed thereon, admitted free of duty.

Two ports, one on the Atlantic, and one on the Pacific, which are to be the termini of the road, and to be free ports.

Power to levy transit and warehouse duties, and to establish such tolls as the grantees may think proper.

Privilege to endure forty-nine years, subject to the right of New Granada to redeem it, at the expiration of twenty years after the completion of the road, on paying $5,000,000; at the expiration of thirty years, on paying $4,000,000; and at the expiration of forty years, on paying $2,000,000.

A deposit of 600,000 francs, (about $120,000,) as a security for the fulfilment of the obligations assumed, to be refunded with interest on the completion of the road.

Two and a half per cent. to be paid for the Government of New Granada, upon all dividends declared.

The results of the survey, thus far, show the following unexpected facilities for a railroad, viz:

Whole length, from sea to sea, not exceeding . .	46 miles.
Summit level, under	300 feet.
Curvatures, with no radius less than	1,500 feet.
Grade for about 26 miles, from Atlantic to Chagres river, nowhere exceeding (per mile)	12 feet.
From Chagres river to summit level, about 10 miles, nowhere exceeding per mile	20 feet.
From summit level, for about 3 miles, nowhere exceeding per mile	50 feet.

And thence descending about 7 miles to the Pacific.

Materials of stone and timber abundant, and of good quality; and an excellent harbor at Navy Bay, six miles distant from Chagres.

The right of way is secured, and the neutrality of the isthmus guaranteed by the government of the United States.

GREAT FIRE IN ST. LOUIS.

We do not publish an account of this disaster as an item of news, but for the purpose of recording some of the leading facts as matter of history. On the night of the 17th May, 1849, a fire occurred on the steamboat White Cloud, lying near the foot of Morgan street. The flames were soon communicated to the steamer Edward Bates, which, floating out and down the stream near the line of boats lying at the levee, the flames were communicated to a number of them as she passed, and in a very short time the whole line of shipping appeared as if enveloped in flames. From the boats the fire was communicated to some low wooden buildings above the corner of Locust and Water street, and also at other points below. The space on Water street from Locust to Chesnut, was entirely consumed. The buildings on both sides of Main street, from Locust to market, were also consumed, except four fireproof tenaments on the west side between Locust and Olive. The east side of Second street was consumed from a point commencing a little north of Pine to Market street. Both sides of Market, from Main to Second street, was consumed also. Below, and disconnected with this district, the fire again made its appearance, consuming nearly all the front on Water street, between Elm and Myrtle. Both sides of Main street, from Elm to Myrtle, and about half the block on the west side of Main, between Elm and Walnut. The east side of Second street, from Elm to Spruce, except two tenaments at the corner of Spruce and the west side of Second, between Myrtle and Spruce.

The true amount of loss sustained by this conflagration will probably never be known. In our estimation, however, it has been greatly exaggerated in many of the public prints. The President of the Board of Assessors, in his report made to the Mayor on the day after the fire, states the value of buildings destroyed at $502,290. We have seen no statement of the accurate amount of insurance that will probably be recovered on account of the real estate; but from facts coming

within our knowledge, we are inclined to the opinion that though there may be cases of individual loss, yet in the aggregate the assurance and the enhanced value of ground in the burnt district is quite equal to the value of the buildings destroyed. We know of one case of a single house, where the owners were gainers of at least $5,000, the ground having sold for more after the fire than could have been obtained for the house and lot before.

In an article which appeared in the Mo. Republican on the 28th May, over the signature of "A Citizen," the stocks of goods in the burnt district is set down at $1,654,495, insurance on the same estimated at $1,147,650. The boats and cargoes consumed are estimated at $439, 500, and insurance on same at $225,500. Another estimate published in the Union fixes the value of the boats and cargoes at $518, 000.

The following is a list of the steamboats burnt:—Taglioni, Boreas No. 3, Alice, American Eagle, Sarah, Montauk, Kit Carson, Timour, Acadia, Mameluke, Prairie, White Cloud, Edward Bates, Eudora, St. Peters, Red Wing, A. Hamilton, Martha, Eliza, Mandan, Belle Isle, Gen. Brooke, and Frolic, in all twenty-three. We are fully persuaded that the actual loss sustained is under $1,000,000, and no fire of the same extent, perhaps, ever took place that caused as little real suffering, or where so few individuals were rendered totally destitute. Many buildings are rapidly rising upon the ruins, and if the disaster had not been followed by the epidemic, a very large portion of the burnt district would doubtless have been rebuilt during the present season.

PERIODICALS, PAMPHLETS, &C.

The Economist.—This is the title of a weekly newspaper recently established at Cannelton, Indiana, edited by Charles H. Mason, Esq. Occupying neutral ground in respect to politics, the "*Economist*" is devoted to subjects connected with the development of the natural resources of the West, but sufficiently deversified with other matter to make it interesting to the general reader. Upon the whole we esteem the "*Economist*" the best model for a useful newspaper that has come under our observation, and thus far the editor has done full justice to the design.

It is refreshing at such a time as this, when public men, and publishers of periodicals place their chief reliance and hopes of success upon the patronage of a party or particular order of individuals, to meet with one who posesses the genius to preceive, and the courage to advocate the true interest of all, without pandering to the prejudices of any. There is a moral dignity in such a course that challenges universal respect, and we esteem the patronage of such a journal, as indicating an improvement in the moral condition of the country. The "*Economist*" is published at $2 00 per annum—payable in advance. We tender to the editor our best wishes for the success of his enterprise.

De Bow's Commercial Review.—We have received the first number of the 7th vol. of this valuable work, and we are truly pleased that our friend De Bow has resumed his editorial labors. The "*Commercial Review*" occupies a place in our library, which we could not supply from any other source. Such a work published at New Orleans, is as necessary to the people of the West, as to those of the South, and we should be pleased to see it obtain a general circulation throughout the valley of the Mississippi. The number before us, contains a large amount of valuable matter.

Practical Hints on the comparative cost and productiveness of the culture of cotton, and the cost and productiveness of its manufacture, addressed to the cotton planters and capitalists of the South. By Charles T. James, of Rhode Island. This is a pamphlet of about 70 pages, containing many excellent views in respect to the economy of manufacturing cotton in the South. The author

says, that for more than twenty years, his time has been devoted to the manufacturing business in all its details, and that during that time he has constructed either in whole or part, between twenty and thirty cotton factories, and put in operation, between two and three hundred-thousand spindles.

The experience of the author gives more than ordinary weight to the facts and views contained in his book. We are indebted to H. SMITH, Esq., of Louisville, Ky., for the privilege of perusing this excellent pamphlet.

GRATITUDE.

FROM AN UNPUBLISHED WORK ON NATURAL AND MORAL ECONOMY, BY THE SENIOR EDITOR.

GRATITUDE is a state of mind arising from a sense of benefits bestowed upon ourselves or upon others, involving emotions more or less pleasing and profound according to the nature and extent of the benefit, the relation of the parties, and the circumstances in which they are respectively situated. This state of mind is the source of desires which prompt us to make a suitable return to the benefactor, to declare his benevolence, and to improve and extend the benefits conferred. These desires are essentially moral, social, and, by a beautiful provision in the economy of nature, our grateful emotions are reflected upon the heart of the benefactor, producing in him a state of mind in many respects corresponding to our own.

But it is important to bear in mind that the degree of pleasure experienced by the benefactor depends upon the nature of his motives; if these be purely benevolent, his pleasure must exceed that of the recipient: it may not be so intense, but is more refined, and free from that deep sense of obligation which mingles with gratitude.

If, however, one should aim to gain an advantage over another by acts of apparent benevolence, or should be moved by an overweening desire for popular approbation, he could not sympathize with the recipients of his bounty; for this is not the reward which he sought, and a consciousness of demerit would prevent that agreeable state of mind which can only be enjoyed by the truly benevolent.

But the sense of gratitude is not limited to such as are immediately connected with a benevolent action. It is experienced, in a modified degree, by every generous mind to whom it is made known; and thus we may perceive what a rich reward awaits the truly benevolent individual, and how admirably the sentiment produced by a good action is made to multiply itself.

Every act of benevolence establishes a new relation between the parties, governed by laws, which each are respectively bound to observe. To entitle one to the rewards of benevolence, his motives must not only be pure, but his conduct free from suspicion; for there is perhaps no action more abhorent to the human mind, than that which is designed to place one in the power of another by exciting his gratitude. One who watches our wants, and coldly calculates the advantages which he may obtain by affording relief at the time of our greatest need, meditates the perpetration of a deed more detestable than robbery. Armed with the instruments of violence, were he to meet us on the highway and denand our property, we should be free to deliver or defend; and, should we resist the demand and do battle in defence of our rights, our conduct would recieve universal approbation. But, when assailed under the garb of benevolence we are disarmed, and bound with cords that may not be broken, without danger of incurring the charge of ingratitude and the condemnation of every generous mind.

Moreover, if the benefactor should imprudently publish his own deeds, or, by word or action unnecessarily remind the recipient of his obligation, such conduct would cancel his claim, and abolish the relation established by his benevolence.

But the fruits of benevolence are often blighted by the selfishness of the party benefited: for there are those who are incapable of conceiving the idea of a disinterested action, and look upon every generous or charitable deed as proceeding from unworthy motives. In the hearts of such individuals there is no place for gratitude: and, instead of improving the benefits which they receive, whatever is be stowed upon them may be regarded as lost to the rest of mankind.

The benefited party is constituted the steward of the benefactor: and unless he improves that which he receives, the stock of benevolence would be exhausted, and but little social improvement would ensue. If like the slothful servant, he should conceal the benefit bestowed upon him, and not put it at usury lest the benefactor should gather where he had not strown, he would violate the laws of benevo-

lence, for indeed it is the privilege of the benevolent to reap where they have not sown: it is the duty of the recipients of their bounty to sow for them, to the end that, the fruits of benevolence may be multiplied, and, abound throughout the earth.

Welling up pure from the depths of the heart the emotions of gratitude overflow the barriers which self love and artificial observances raise between individuals of different conditions, opening the way to mutual sympathy and social intercourse; and, as the streams and rivulets from mountain and valley flow into the ocean, and their waters return again in generous showers and gentle dews to refresh the earth, and make glad the heart of man, so do the fruits of benevolence descend upon the benefactor.

One that has heard the faltering accents, and seen the moist eye of gratitude — his own heart growing warm and full the while — has tasted of the richest moral banquet allowed to man, a feast to which none can gain admittance except the truly benevolent.

Yet, there is a higher source of gratitude than human benevolence: but, as we can add nothing to the happiness of Him from whom we receive our being how shall we requite His goodness? the word of inspiration answers this inquiry. Love thy neighbor as thy self, do unto others as you would they should do unto you, be charitable, just, and merciful; and, if this is not sufficient forthy boundless gratitude, love your enemies, and pray for those who dispitefully use you.

TO THE PATRONS OF THE WESTERN JOURNAL.

The publication of the *Western Journal* having been suspended for three months, it is due alike to our patrons and to ourselves, that the causes which prevented its regular appearance should be made known.

Owing in part to the sickness of one of our publishers, the printing of the May number was delayed somewhat beyond the usual time; this number however was printed, and two of the five forms in which it was worked off, had been sent to the binder, who, dying of the cholera a few days before the occurence of the great fire, the other three forms remained at the printing office, and were consumed.

Our enterprising and worthy publishers, Messrs. Charles & Hammond lost their entire establishment; the smallest article was not saved from the flames. The other printing establishments had also suffered so much by the fire, that we concluded that the immediate reprinting of the May number was out of the question; and made up our minds to wait until Messrs. Charles & Hammond could replace their presses and materials, by purchases in Cincinnati. This they effected with great energy and dispatch; but when they were again ready to proceed with their business,—owing to the cholera which was then raging to a fearful extent—they found it impossible to procure sufficient labor to enable them to progress with our work.

And finally we have been compelled to get the printing of this number completed at the office of the *Union*, which, having escaped the fire, was better able to keep its operatives together. Those who are familiar with the terrible disasters to which our city has been subjected for the last three months, will be able to appreciate the difficulties by which we have been surrounded; and we trust that their confidence will not be impared by our late misfortunes. Our patrons will loose nothing by this temporary suspension in the end. The twelve numbers of the 2nd and 3rd vols. will be furnished to our subscribers; but our editorial year will close with the month of March, instead of December, provided we meet with no further misfortune.

We trust that it will not be considered indelicate in connection with this subject, to call the attention of those who have not paid for the current volume, to the importance (to us) of making IMMEDIATE PAYMENT. We can scarcely suppose, that there is one of our subscribers who cannot without inconvenience pay the small amount which is due to us; these small sums are to us of great importance, and at the present time absolutely necessary. Those residing at a distance are authorized to remit by mail.—EDITORS.

JOHN D. M'MURRAY JAMES M. DORMAN.

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The Western Journal is designed to embrace every subject connected with Agriculture, Commerce, Manufactures, Mechanic Arts, Mines, and Internal Improvement.

A portion of the work will be appropriated to Statistics, which will be collected and arranged with reference to the leading subjects contained in the respective numbers.

The development of the vast resources of the valley of the Mississippi, and the improvement of the intellectual and social condition of its inhabitants, will be constantly kept in view; and the leading article of each number will be devoted to the advancement of these objects. In attmpting to illustrate and give direction to the economy connected with the leading pursuits of the country, the Editors have undertaken more than has been done, or proposedby any other journal with which they are acquainted. And it is by their labors in this department mainly that they expect to make the work useful.

Contributions are solicited on all subjects properly embraced in the design of the work.

☞ Clubs, composed of four or more individuals, will be furnished with the Western Journal at the rate of $2 50 per annum.

☞ Owing to the enlargement of the work, six numbers will hereafter constitute a volume, and a general Index will be made out to accompany the 6th and 12th numbers.

☞ Publishers of Newspapers who will give the foregoing prospectus one or more insertions in their papers, and pay one dollar, will be furnished with the work for one year.